

CAPCOM

STREET FIGHTER

Operator's Manual



CAPCOM USA, INC. Customer Service

If reading through this manual does not lead to solving your Street
Fighter™ maintenance or repair problem, call CAPCOM USA
Customer Service office:

CAPCOM USA, INC.

1283-C Mountain View-Alviso Road
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STREET FIGHTER



Operator's Manual
with Illustrated Parts Lists

CAPCOM

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Notice Regarding Non-CAPCOM® Parts



WARNING



Use of non-CAPCOM parts or modifications of any CAPCOM game circuitry may adversely affect the safety of your game, and may cause injury to you and your players.

You may void the game warranty (printed on the inside back cover of this manual) if you do any of the following:

- Substitute non-CAPCOM parts in the game.
- Modify or alter any circuits in the game by using kits or parts *not* supplied by CAPCOM USA, Inc.

NOTE

This equipment generates, uses, and can radiate radio frequency energy, and if not installed and used in accordance with the instruction manual, may cause interference to radio communications. It has been tested and found to comply with the limits for a Class A computing device pursuant to Subpart J of Part 15 of Federal Communications Commission (FCC) Rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment. Operation of this equipment in a residential area or modification to this equipment is likely to cause interference, in which case the user, at his own expense, will be required to take whatever measures may be required to correct the interference. If you suspect interference from a CAPCOM game at your location, check the following:

- All ground wires in the game are properly connected as shown in the game wiring diagram.
- The power cord is properly plugged into a grounded three-wire outlet.
- On games provided with an Electromagnetic Interference (EMI) ground plane, be sure the game printed-circuit boards (PCBs) are properly installed on the EMI Ground Plane. If you are still unable to solve the interference problem, please contact Customer Service at CAPCOM USA, Inc. See the inside front cover of this manual for our address and telephone number.

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Safety Summary

The following safety precautions apply to all game operators and service personnel. Specific warnings and cautions will be found throughout this manual where they apply.

⚠ WARNING ⚠

Properly Ground the Game. Players may receive an electrical shock if this game is not properly grounded! To avoid electrical shock, do not plug in the game until it has been inspected and properly grounded. This game should only be plugged into a grounded three-wire outlet. If you have only a 2-wire outlet, we recommend you hire a licensed electrician to install a grounded outlet. Players may receive an electrical shock if the control panel is not properly grounded! After servicing any parts on the control panel, check that the grounding wire is firmly secured to the inside of the control panel. Only then should you lock up the game.

AC Power Connection. Before connecting the game to the AC power source, verify that the game's power supply is properly configured for the line voltage in your location.

Disconnect Power During Repairs. To avoid electrical shock, disconnect the game from the AC power source before removing or repairing any part of the game. When removing or repairing the video display, extra precautions must be taken to avoid electrical shock because high voltages may exist within the display circuitry and cathode-ray tube (CRT) even after power has been disconnected. Do not touch internal parts of the display with your hands or with metal objects! Always discharge the high voltage from the CRT before servicing this area of the game. To discharge the CRT: Attach one end of a large, well-insulated, 18-gauge jumper wire to ground. Momentarily touch the free end of the grounded jumper to the CRT anode by sliding it under the anode cap. Wait two minutes and discharge the anode again.

Use Only CAPCOM Parts. To maintain the safety integrity of your CAPCOM game, do not use non-CAPCOM parts when repairing the game. Use of non-CAPCOM parts or other modifications to the game circuitry may adversely affect the safety of your game, and injure you or your players.

Handle the CRT With Care. If you drop the CRT and it breaks, it may implode! Shattered glass can fly six feet or more from the implosion.

Use the Proper Fuses. To avoid electrical shock, use replacement fuses which are specified in the parts list for this game. Replacement fuses must match those replaced in fuse type, voltage rating, and current rating. In addition, the fuse cover must be in place during game operation.

CAUTION

Properly Attach All Connectors. Make sure that the connectors on each printed-circuit board (PCB) are properly plugged in. Note that they are keyed to fit only one way. If they do not slip on easily, do not force them. A reversed connector may damage your game and void the warranty.

Ensure the Proper AC Line Frequency. Video games manufactured for operation on 60 Hz line power (i.e., United States) must not be operated in countries with 50 Hz line power (i.e., Europe). The fluorescent light ballast transformer will overheat, causing a potential fire hazard if 60 Hz games are operated on power lines using 50 Hz. Check the product identification label of your game for the line frequency required.

ABOUT NOTES, CAUTIONS, AND WARNINGS

In this publication, notes, cautions, and warnings have the following meaning:

NOTE—A highlighted piece of information.

CAUTION—Equipment and/or parts can be damaged or destroyed if instructions are not followed. You will void the warranty on CAPCOM printed-circuit boards, parts thereon, and video displays if equipment or parts are damaged or destroyed due to failure of following instructions.

WARNING—Players and/or technicians can be injured or killed if instructions are not followed. (The word **WARNING** is always surrounded by international warning symbols—triangles with exclamation marks inside of them.)

Chapter 1

Set-Up



How to Use This Manual

This manual is written for game operators and service technicians, and provides information for setting up, playing, testing, and maintaining your Street Fighter game.

The manual is divided into the following chapters:

- Chapter 1 contains set-up and game play information.
- Chapter 2 contains self-test procedures.
- Chapter 3 contains preventive and corrective maintenance procedures.
- Chapter 4 contains illustrated parts lists.

Schematic diagrams for the Street Fighter game circuitry are contained in the *Schematic Package Supplement* (SP-306) included with your game.

This chapter includes information required to set up and play your Street Fighter game. Carefully read this information before applying power to the game.



WARNING



To avoid electrical shock, do not plug in the cabinet until it has been properly inspected and set up for the line voltage in your area.

This cabinet should only be connected to a grounded three-wire outlet. If you have only a two-wire outlet, we recommend you hire a licensed electrician to install a grounded outlet. Players can receive an electrical shock if the game is not properly grounded.

Do not touch internal parts of the display with your hands or with metal objects.



⚠ WARNING ⚠

When moving the cabinet, we recommend that a second person help due to the excessive weight of the cabinet.

Inspecting the Game

CAUTION

Do not install the control pod or plug in the game until you have completed the following inspection steps.

Please inspect your Street Fighter game carefully to ensure that the game is complete and delivered to you in good condition. Figure 4-1 shows the locations of the component parts of the game. Table 1-1 lists space, power, and environmental requirements.

1. Examine the exterior of the cabinet and the control pod for dents, chips, or broken parts.
2. Use a Phillips screwdriver to remove the screws holding the rear access panel to the cabinet. Unlock and remove the panel. Unlock and open the coin door. Inspect the interior of the cabinet as follows:
 - a. Ensure that all plug-in connectors (on the cabinet harnesses) are firmly plugged in. Do not force connectors together. The connectors are keyed so they only fit in the proper orientation.
 - b. Ensure that all plug-in integrated circuits on each PCB are firmly plugged into their sockets.
 - c. Inspect the power cord for any cuts or dents in the insulation.
 - d. Inspect the power supply. Make sure that the correct fuses are installed. Check that the harness is plugged in correctly and that the fuse-block cover is mounted in place. Check that the green ground wire is connected.
 - e. Inspect other major subassemblies, such as the video display, printed-circuit boards (PCBs), controls, speakers, and fluorescent light. Make sure that they are mounted securely and that the green ground wires are connected.
 - f. Make sure that the game power source and operating environment is within the limits specified in Table 1-1, Game Specifications.

Installing the Control Pod

Before playing the game, the control pod must be removed from the shipping container and positioned on

Table 1-1 Game Specifications

Characteristic	Specification
Power Consumption	177 Watts
Temperature	+5° to +38° C (+37° to +100° F)
Humidity	Not to exceed 95% relative
Line Voltage	102 to 132 VAC
Width	27½ in. (70 cm) without control pod installed 47¼ in. (120 cm) with control pod installed
Depth	47 in. (119 cm)
Height	77½ in. (197 cm)
Weight	422 lbs. (191 kg) without control pod installed 480 lbs. (217 kg) with control pod installed

the cabinet. Then the Punch/Kick control tubes must be attached to the junction box. Perform the following procedure to install the control pod and the control tubes. (See Figure 1-1.)

1. Remove the control pod from the shipping container.
2. Remove the plastic bag of control pod hardware stapled to the front of the cabinet below the video display.
3. Locate the four holes on the pod mounting panel and the four holes on the vertical mounting panel below the video display. Then position the control pod on the cabinet to align the holes on the four bottom corners and back of the control pod with the holes on the cabinet.
4. Unlock and open the coin door. On the underside of the pod mounting panel, install one split-lock washer, fender washer, and hex-head screw into the four corners of the control pod.
5. Unlock and open the rear service door. Reach through the right-side panel opening inside the cabinet and install one split-lock washer, fender washer, and hex-head screw into the vertical mounting panel. Do the same inside the left-side panel opening of the cabinet.
6. Then install one split-lock washer, fender washer, and hex-head screw into the two holes of the vertical mounting panel. (A total of four screws, split-lock washers, and fender washers should now be installed in the vertical mounting panel.)

NOTE

Hook up the tubes to the junction box from left to right as follows:

BLUE — 1-Player Punch Control
 BLACK — 1-Player Kick Control
 RED — 2-Player Punch Control
 GREEN — 2-Player Kick Control

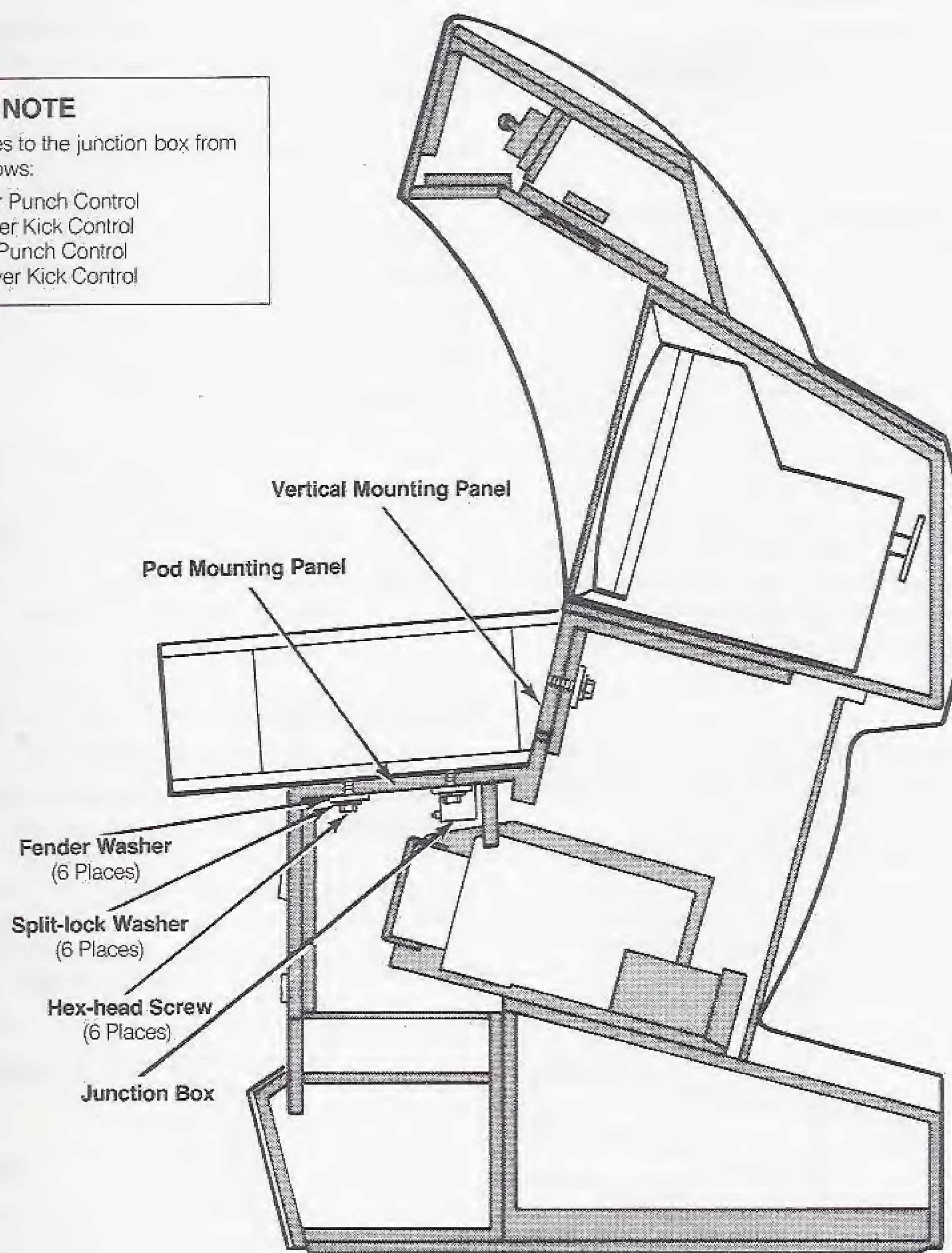


Figure 1-1 Installing the Control Pod

7. Through the coin door opening, use a socket wrench to tighten the four screws and eight washers on the bottom of the pod mounting panel.
8. Through the underside control pod opening, locate the control panel harness and connect it at J1 and J2 on the End PCB.
9. Through the coin door opening, locate the junction box attached to the underside of the pod mounting panel. The junction box has four fittings on both the rear and front sides. (The Game PCB tubes are already attached to the rear of the junction box.)
10. Each of the blue and the red Punch/Kick controls located on the control panel has a color-coded silicone tube attached to it. Attach each of the four color-coded tubes to the appropriate fitting on the front panel of the junction box. The color code for the tubes from (left to right on the junction box) is:
 - Blue—1-player Punch control
 - Black—1-player Kick control
 - Red—2-player Punch control
 - Green—2-player Kick control

Control and Switch Locations

The following control and switch descriptions are for the Street Fighter game. Refer to Figure 1-2 for the locations of the controls and switches.

Power On/Off Switch

The power on/off switch is located at the bottom rear of the cabinet. (See Figure 4-1.)

Volume Control

Two volume controls are located behind the coin door on the metal bracket attached to the right side panel. The volume controls adjust the level of the stereo sound system of the game. The left control adjusts the left speaker volume; the right control adjusts the right speaker volume. These controls have been adjusted at the factory so that there is some volume even when the knobs have been turned off. If it is necessary to turn the volume completely down, the volume potentiometers mounted on the top Game PCB must be adjusted. (See Figure 4-6.)

Coin Counter

The coin counter is located behind the coin door in the right corner of the cross panel of the cabinet. The coin counter records the number of coins deposited.

Self-Test Switch

The game can be put in the Self-Test Mode to check game operation by turning on one of the two existing self-test switches. The more accessible self-test switch is located on the End PCB, connected to the front of Mount Board PCB Assembly attached to the rear right panel of the cabinet. (See Figure 1-2.)

A second self-test switch is located on the dual-inline-package (DIP) switch, DIP 2, on the top Game PCB. The CAPCOM Game PCB part number is 86116-A-2. Turning slide switch 8 on DIP 2 to the *on position* also selects the Self-Test Mode. Refer to Chapter 2 for a complete description of self-test operation.

NOTE

After turning on the self-test switch, the game power must be turned off and then on again to enter the Self-Test Mode.

Service Switch

The service switch (a two-pin header connector) is located on the End PCB, connected to the front of the Game PCB. Both PCBs are located on the lower right side

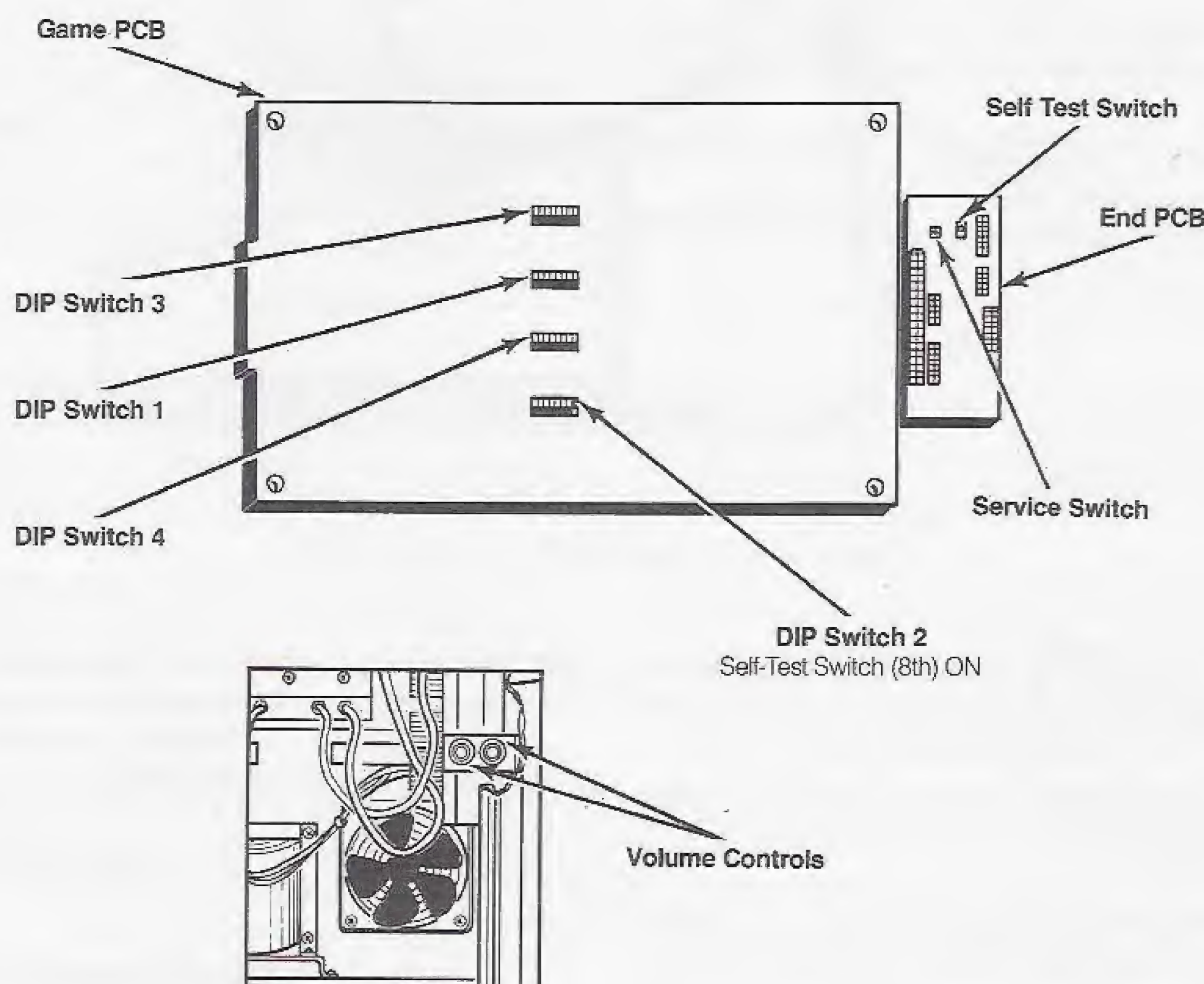


Figure 1-2 Control and Switch Locations

of the cabinet. The switch is used as a coin switch. Squeezing the two connector pins together gives the game one credit.

Setting the Coin and Game Option Settings

The Street Fighter cabinet has four dual-inline-package (DIP) option switches located on the Game PCB. (See Figure 1-2.)

- DIP Switch 1 is at location 7E. Slide switches 1 through 6 are for selecting coin options.
- DIP Switch 2 is at location 13E. Slide switches 2 and 5 through 8 are for selecting game options.
- DIP Switch 3 is at location 6E. All slide switches are for selecting game options.
- DIP Switch 4 is at location 11E. Slide switches 1 through 3 are for selecting game options.

Set the coin and credit option settings, and the game option settings by changing the settings of the DIP switches. Refer to Table 1-2 through Table 1-5 for the available options and default (recommended) settings.

To change the coin and credit settings, and the game settings, use a pen or a sharp-pointed instrument to slide the appropriate small buttons to different settings. With the Game PCB installed in the cabinet, slide the button down for *on* and up for *off*. The joystick controls and the Punch/Kick buttons are *not* used to change these settings.

Refer to Chapter 2, Self-Test, for a more detailed description and explanation of the option settings.

Game Play

Street Fighter is a one- or two-player game where two young men, Ryu and Ken, are both experts in the art of karate and bitter rivals as well. They both aim to be the strongest street fighter in the world by challenging all comers from around the globe. Who will be victorious, Ryu or Ken?

Game Play Instructions

Game play begins when you insert your coins and press the 1-player Start button. There are five countries and ten opponents. The country flags of Japan, United States of America, United Kingdom, and China are displayed. Select the specific country by moving the joystick until the flag is circled with a yellow border. Game play for the selected country then begins. A second player can enter the game at any time. After the second player inserts the coins, a screen message welcoming the challenger is displayed. Use the Punch button and joystick simultaneously to punch your opponent, and the Kick button and

Table 1-2 DIP Switch 1 Option Settings

Settings of Switch 1 on Street Fighter Game PCB (at 7E)								Option
1	2	3	4	5	6	7	8	
Off	Off	Off						Coins Per Credit (Right Mechanism)
On	Off	Off						1 Coin 1 Credit ◀
Off	On	Off						1 Coin 2 Credits
On	On	Off						1 Coin 3 Credits
Off	Off	On						1 Coin 4 Credits
On	Off	On						1 Coin 6 Credits
Off	On	On						2 Coins 1 Credit
On	On	On						3 Coins 1 Credit
								4 Coins 1 Credit
								Coins Per Credit (Left Mechanism)
			Off	Off	Off			1 Coin 1 Credit ◀
			On	Off	Off			1 Coin 2 Credits
			Off	On	Off			1 Coin 3 Credits
			On	On	Off			1 Coin 4 Credits
			Off	Off	On			1 Coin 6 Credits
			On	Off	On			2 Coins 1 Credit
			Off	On	On			3 Coins 1 Credit
			On	On	On			4 Coins 1 Credit

◀ Manufacturer's recommended settings

Table 1-3 DIP Switch 2 Option Settings

Settings of Switch 2 on Street Fighter Game PCB (at 13E)								Option
1	2	3	4	5	6	7	8	
	Off							Attract Music
	On							Music ◀
								No Music
				Off				Game Speed
				On				Normal ◀
								Slow
						Off		Sound During Dem-
						On		onstration
								Sound ◀
								No Sound
							Off	Screen Stop
							On	Normal ◀
								Stop
								Self-Test
							Off	Normal (Attract
								Mode) ◀
							On	Self-Test Mode

◀ Manufacturer's recommended settings

joystick simultaneously to kick your opponent. Each match consists of the best out of three rounds. The first player to win two rounds is the winner of the match.

Table 1-4 DIP Switch 3 Option Settings

Settings of Switch 3 on Street Fighter Game PCB (at 6E)								Option
1	2	3	4	5	6	7	8	
Off	Off	Off						Game Continuation
On	Off	Off						5th Stage Maximum ◀
Off	On	Off						4th Stage Maximum
On	On	Off						3rd Stage Maximum
Off	Off	On						2nd Stage Maximum
Off	On	On						1st Stage Maximum
								None
								Round Time Count
			Off	Off				100 ◀
			On	Off				150
			On	On				250
								Game Difficulty
				Off	Off			Normal ◀
				On	Off			Easy
				Off	On			Difficult
				On	On			Very Difficult
								Buy-In Feature*
							Off	5th Stage Maximum ◀
							On	4th Stage Maximum
							Off	3rd Stage Maximum
							On	2nd Stage Maximum
							Off	1st Stage Maximum
							Off	None

*Buy-In Feature option requires that three switches be set (switch 8 on DIP Switch 3 and switches 1 and 2 on DIP Switch 4).

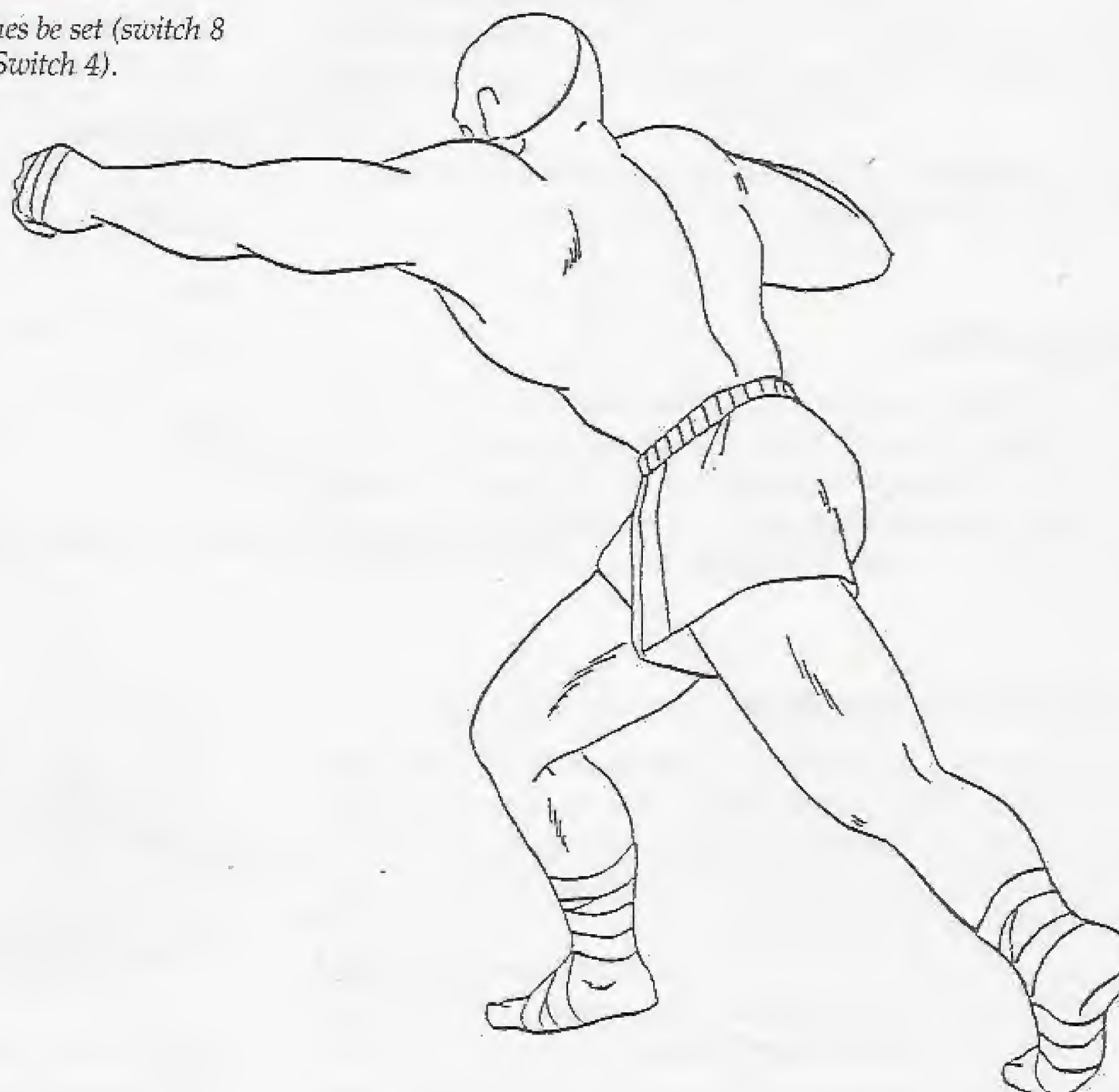
◀ Manufacturer's recommended settings

Table 1-5 DIP Switch 4 Option Settings

Settings of Switch 4 on Street Fighter Game PCB (at 11E)								Option
1	2	3	4	5	6	7	8	
Off	Off							Buy-In Feature, Continued*
Off	Off							5th Stage Maximum ◀
On	Off							4th Stage Maximum
On	Off							3rd Stage Maximum
Off	On							2nd Stage Maximum
Off	On							1st Stage Maximum
On	On							None
								Number of Countries Selected
			Off					4 Countries ◀
			On					2 Countries

*Buy-In Feature option requires that three switches be set (switch 8 on DIP Switch 3 and switches 1 and 2 on DIP Switch 4).

◀ Manufacturer's recommended settings

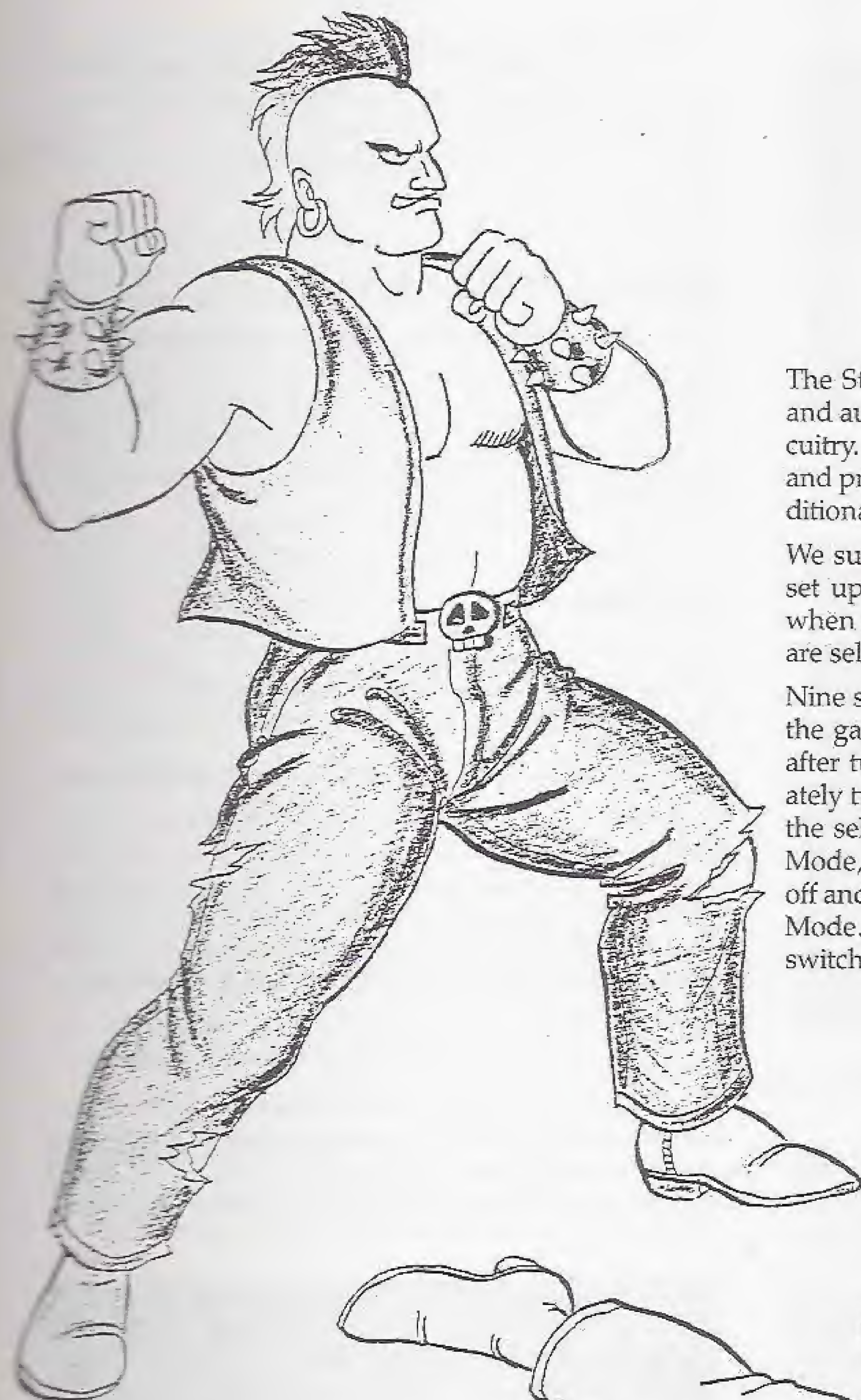


Self-Test

The Street Fighter game tests itself and provides visual and audible indications of the condition of the game circuitry. Self-test information is displayed on the screen and presented through the stereo sound system. No additional equipment is required.

We suggest that you perform a self-test when you first set up the game, each time you collect the money, or when you suspect game failure. Coin and game options are selected in the Self-Test Mode.

Nine self-test screens provide information pertaining to the game circuits. The game enters the Self-Test Mode after turning on the self-test switch, and then immediately turning the game power off and on again. Turning the self-test switch off at any time during the Self-Test Mode, and then immediately turning the game power off and on again, causes the game to return to the Attract Mode. See Figure 1-2 for the location of the self-test switch.



Self-Test Switch

The game can be put in the Self-Test Mode to check game operation by turning on one of the two existing self-test switches. The more accessible self-test switch is located on the End PCB, connected to the front of Mount Board PCB Assembly. This assembly is attached to the rear right panel of the cabinet. (See Figure 1-2.)

A second self-test switch is located on the dual-inline-package (DIP) switch, DIP 2, on the top Game PCB. Turning slide switch 8 on DIP 2 to the *on position* also selects the Self-Test Mode.

NOTE

After turning on the self-test switch, the game power must be turned off and then on again to enter the Self-Test Mode.

DIP Switch Settings

The Street Fighter cabinet has four dual-inline-package (DIP) option switches located on the Game PCB. (See Figure 1-2.)

- DIP Switch 1 is at location 7E. Slide switches 1 through 6 are for selecting coin options.
- DIP Switch 2 is at location 13E. Slide switches 2 and 5 through 8 are for selecting game options.
- DIP Switch 3 is at location 6E. All slide switches are for selecting game options.
- DIP Switch 4 is at location 11E. Slide switches 1 through 3 are for selecting game options.

Set the coin and the game option settings by changing the settings of the DIP switches. Refer to Table 1-2 through Table 1-5 for the available options and default (recommended) settings.

To change the coin and the game settings, use a pen or a sharp-pointed instrument to slide the appropriate small buttons to different settings. With the Game PCB installed in the cabinet, slide the button down for *on* and up for *off*. The joystick control and the Punch/Kick buttons are *not* used to change these settings.

Service Switch

The service switch (a two-pin header connector) is located on the End PCB, connected to the front of the Game PCB. Both PCBs are located on the lower right side of the cabinet. The switch is used as a coin switch. Squeezing the two connector pins together gives the game one credit.

NOTE

During the self-test, use only the 1-player joystick or Punch/Kick buttons to select or to display a specific test. The 2-player controls are *not* used in the self-test (except for the 2-player joystick in the Scroll Test).

Initial Self-Test Screen

The Initial Self-Test screen is shown in Figure 2-1. This test provides a visual check of the game Work RAM and Video RAM, sound circuitry, coin mechanisms, DIP switches, and control switches. The test consists of the RAM Test, Sound Test, Input Disposition (or Switch Bit) Test, and Punch/Kick Control Test.

RAM Test

The RAM Test displays the condition of the game Work RAM and the Video RAM. The message *OK* is displayed if the RAM is normal. If the RAM fails, the message *BAD* is displayed.

Sound Test

The Sound Test indicates the condition of the sound-effects circuitry (when sound is selected in the Attract Mode setting). This test is displayed on the screen as:

SOUND
00

Different sound numbers can be selected. The number is selected by moving the joystick up (toward the display) or down. Moving the joystick up increments the sound number, and moving it down decrements the number.



Figure 2-1 Initial Self-Test Screen

Then pressing the 1-player Punch button starts the selected sound/music.

Input Disposition (Switch Bit) Test

The Input Disposition (or Switch Bit) Test indicates the address and bit information of the game controls, DIP switches, and coin mechanisms. This information is displayed in three columns. The first column displays the code (or address) for each switch. The second and third columns correspond bit to bit to the specific switch/mechanism and indicates the current setting. 1 denotes that the switch is on; 0 denotes that it is off.

Code	Switch/Mechanism	Bit 0-7	Bit 8-F
C00000	Coin mechanism	1-player	2-player
C00002	Joystick	1-player	2-player
C00004	Punch button	1-player	2-player
C00006	Kick button	1-player	2-player
C00008	DIP Switch	DIP 1	DIP 2
C0000A	DIP Switch	DIP 3	DIP 4
C0000C	Start Button	1-player (Bit 0) 2-player (Bit 1)	
	Service Switch	(Bit 2)	

Punch/Kick Control Test

The Punch/Kick Control Test information is displayed in the lower right screen corner. The first column indicates the type of control to test, either the Punch or Kick button. The second and third columns indicate whether the control is 1-player or 2-player. Press or hit the 1-player or 2-player control and the strength of the hit is displayed.

Move the 1-player joystick up and press the Kick button to advance to the Self-Test Menu screen.

Self-Test Menu

The Self-Test Menu screen is shown in Figure 2-2. This screen lists the seven available types of Street Fighter self-tests:

Dot Cross Hatch Test
Color Test
Video RAM Color Test
Video RAM Character Test
Object Character Test
Scroll Test
Output Test

Moving the 1-player joystick up and simultaneously pressing the 1-player Kick button displays the Self-Test Menu. Then moving the 1-player joystick up/down selects a specific test; and the selected test name flashes. Pressing the Punch button displays the selected test screen.

Move the 1-player joystick up and press the Kick button to return to the Self-Test Menu screen.

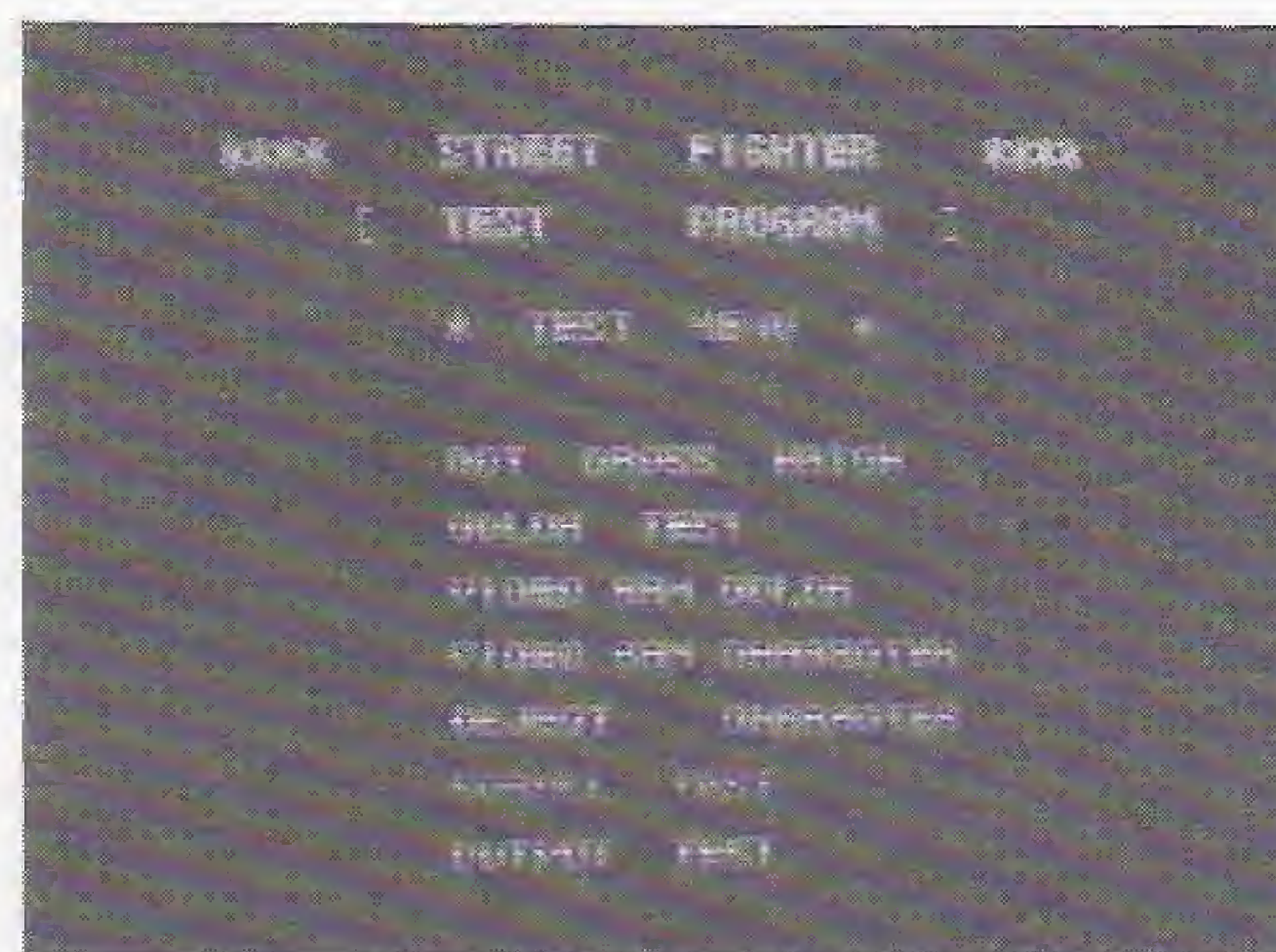


Figure 2-2 Self-Test Menu Screen

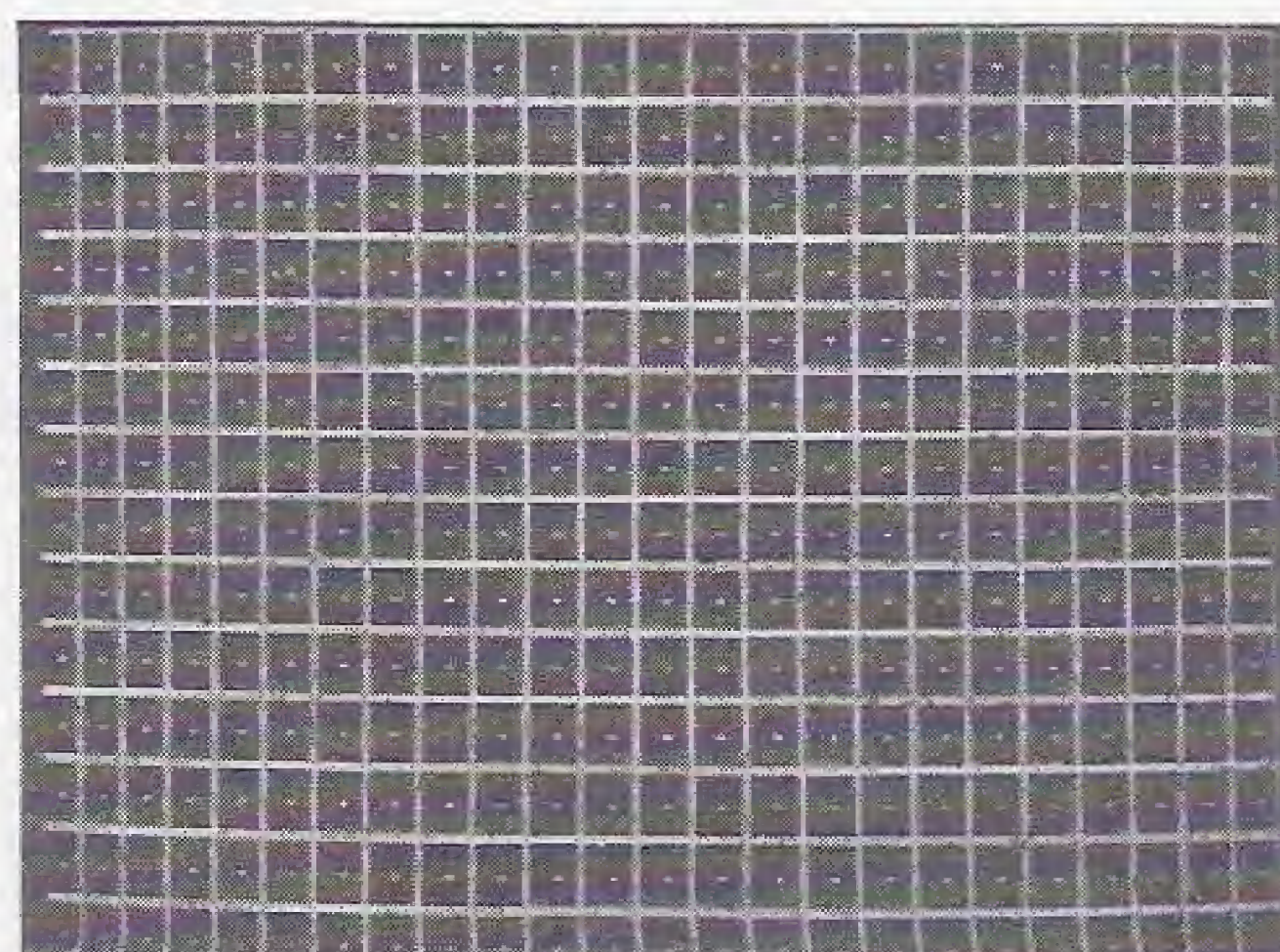


Figure 2-3 Dot Cross Hatch Test Screen

Dot Cross Hatch (Convergence) Test

The Dot Cross Hatch Test (or Convergence) screen is shown in Figure 2-3. This screen is used to adjust the horizontal and vertical functioning of the video display. The screen should show a white grid pattern with one white dot within each grid.

This white-dot convergence pattern can be used to adjust the display size, centering, linearity, and convergence. The pattern can also be used to adjust screen size, centering, and brightness (black level). To obtain the proper screen size, adjust the pattern to be as large as the face of the CRT: all four pattern corners should be just at the corners of the CRT. Each of the grid lines should show no pincushioning or barreling. Refer to the video display manual included with your game for more detailed adjustment procedures or to determine possible cause of failure. Move the 1-player joystick up and press the Kick button to return to the Self-Test Menu screen.

Color Test

The Color Test screen is shown in Figure 2-4. This test indicates the condition of the video display color circuits (red, green, blue). The screen displays four sets of horizontal color bars. Each bar should match the color name indicated to the left of the bar.

Move the 1-player joystick up and press the Kick button to return to the Self-Test Menu screen.

Video RAM Color Test

The Video RAM Color Test screen is shown in Figure 2-5. This test indicates the condition of the color control when the video RAM characters are created. The screen displays three sets of vertical color bars. Next to each set is the bank number.

Move the 1-player joystick up and press the Kick button to return to the Self-Test Menu screen.

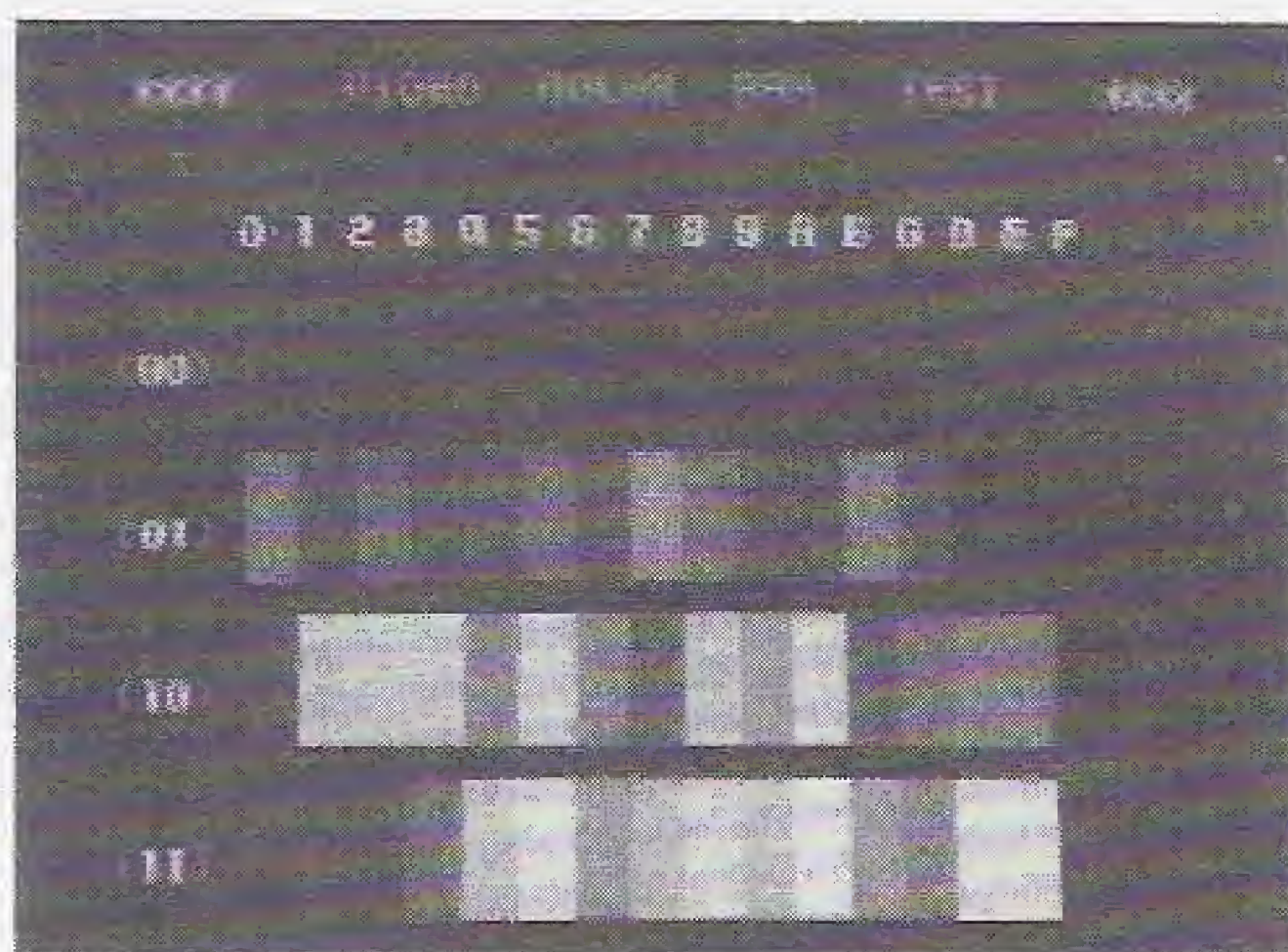


Figure 2-4 Color Test Screen

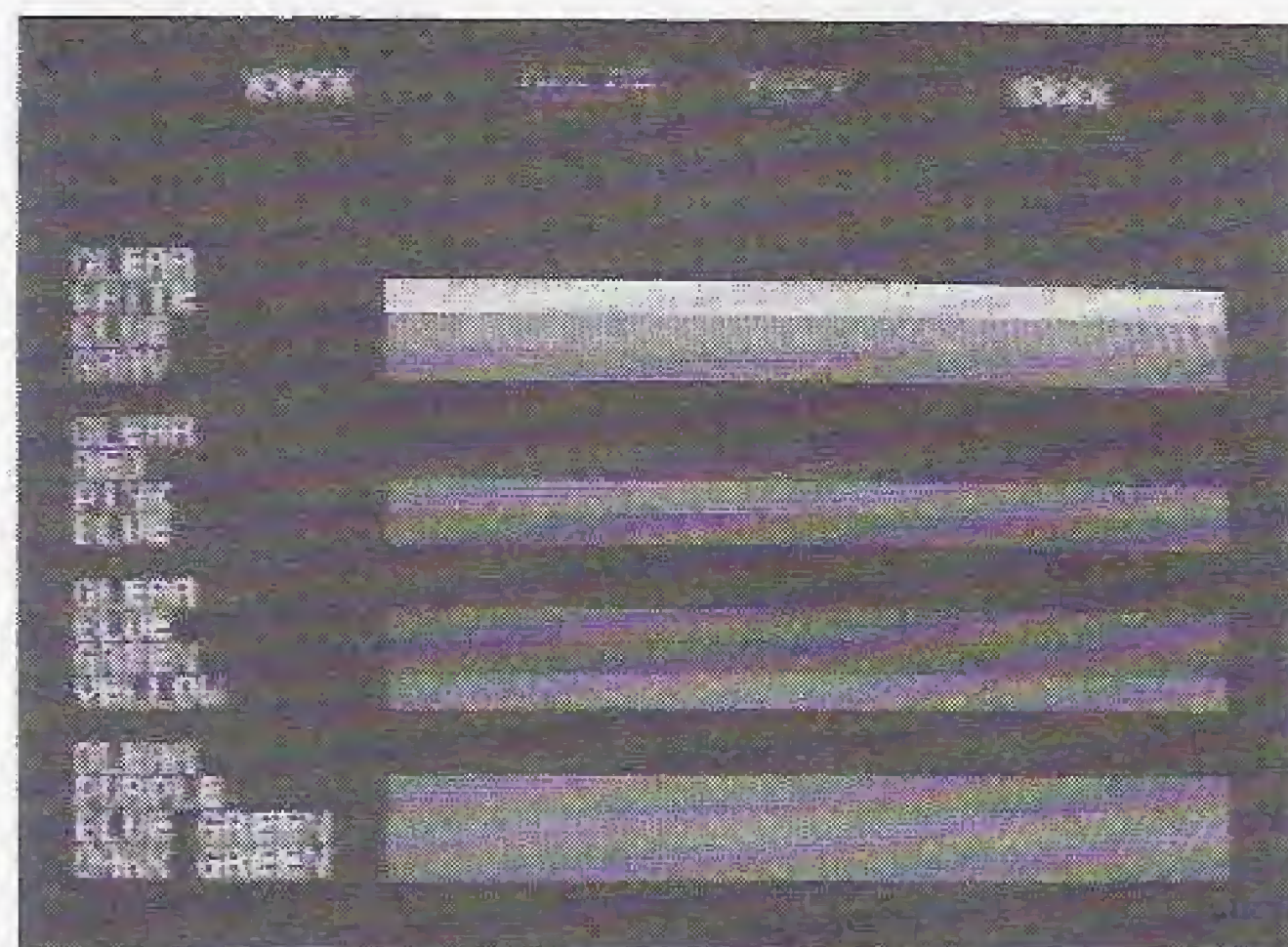


Figure 2-5 Video RAM Color Test Screen

Video RAM Character (Static Playfield) Test

The Video RAM Character (or Static Playfield) Test screen is shown in Figure 2-6. This screen checks the condition of the video RAM characters (alphanumerics) and color palettes.

The screen displays the bank number and the color number. Change the bank number by moving the joystick up or down. The object character scrolls in the same direction that the joystick is moved. A different object is displayed when the bank number is changed. Change the color number by moving the joystick left or right. The object color changes when the number is changed.

Move the 1-player joystick up and press the Kick button to return to the Self-Test Menu screen.

Object Character Test

The Object Character Test screen is shown in Figure 2-7. This screen indicates the condition of the motion object buffer circuit.

The screen displays the bank number and the color number. Change the bank number by moving the joystick up or back. The object character scrolls in the same direction that the joystick is moved. A different object is displayed when the bank number is changed. Change the color number by moving the joystick left or right. The object color changes when the number is changed.

Move the 1-player joystick up and press the Kick button to return to the Self-Test Menu screen.

Scroll Test

The Scroll Test screen is shown in Figure 2-8. This screen indicates the condition of some of the graphics ROM, and the vertical and horizontal scroll registers.

The screen displays two scrolling playfields (background or foreground), the point indication, and the center screen address in the following manner:

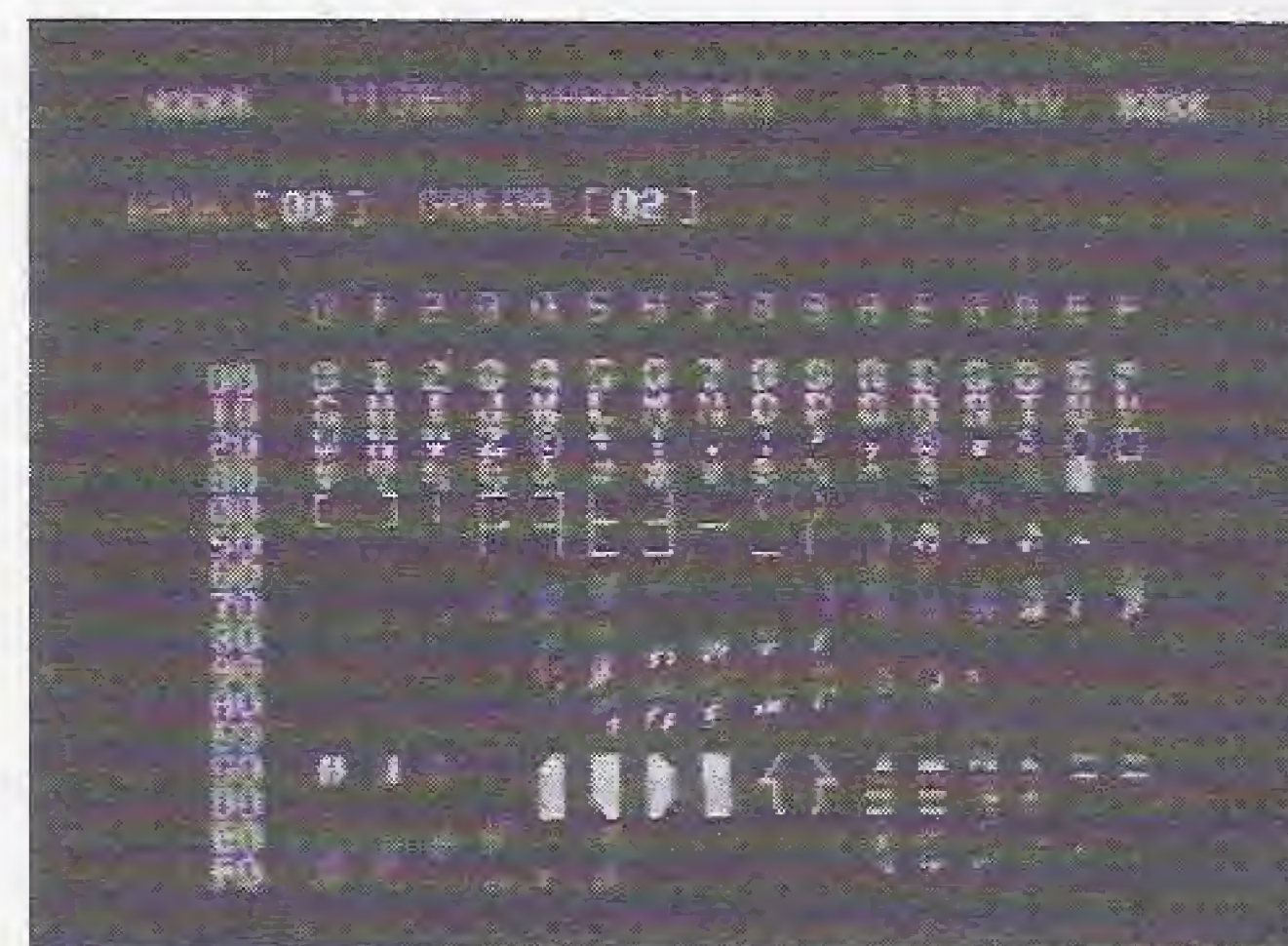


Figure 2-6 Video RAM Character Test Screen

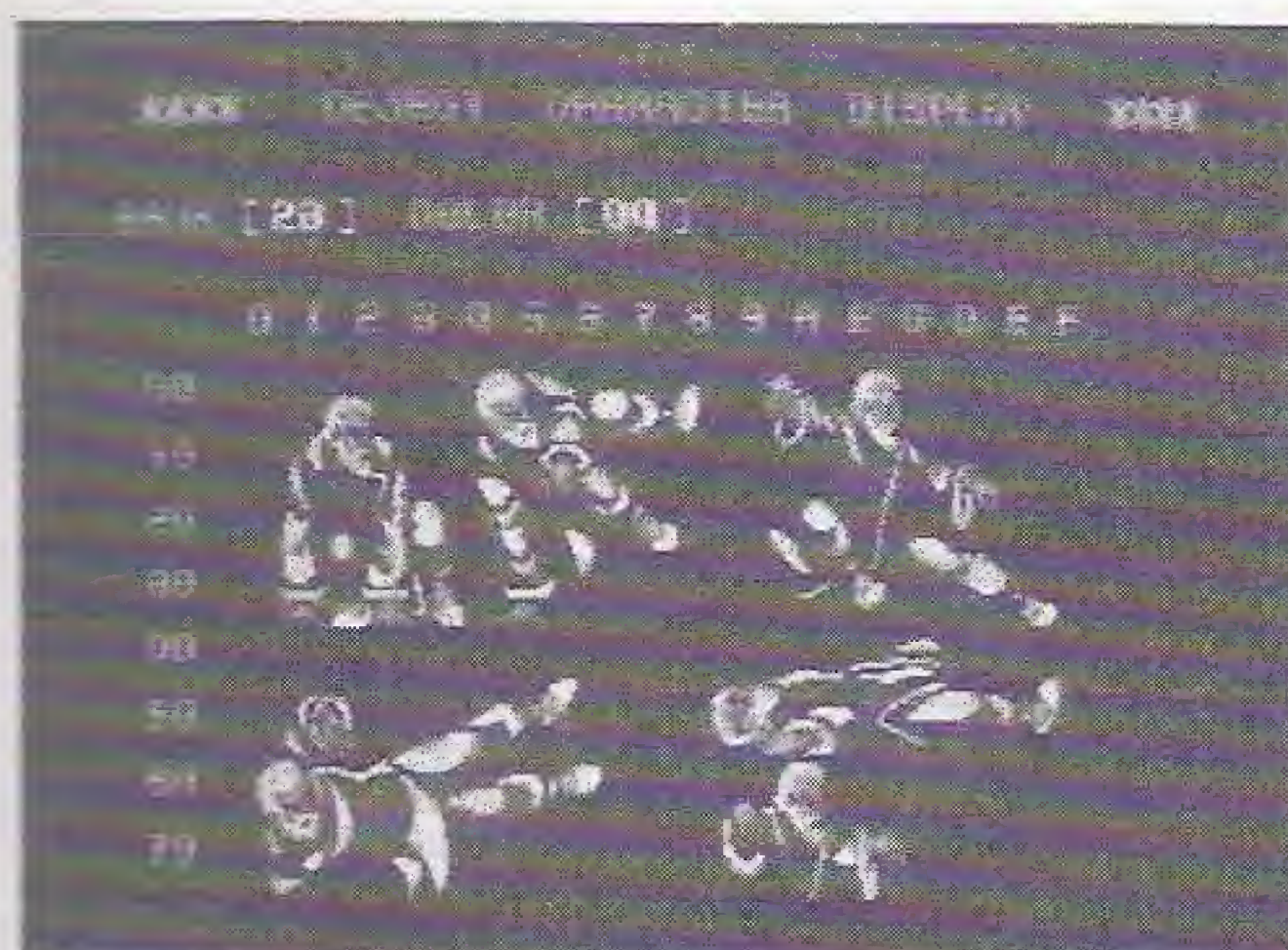


Figure 2-7 Object Character Test Screen

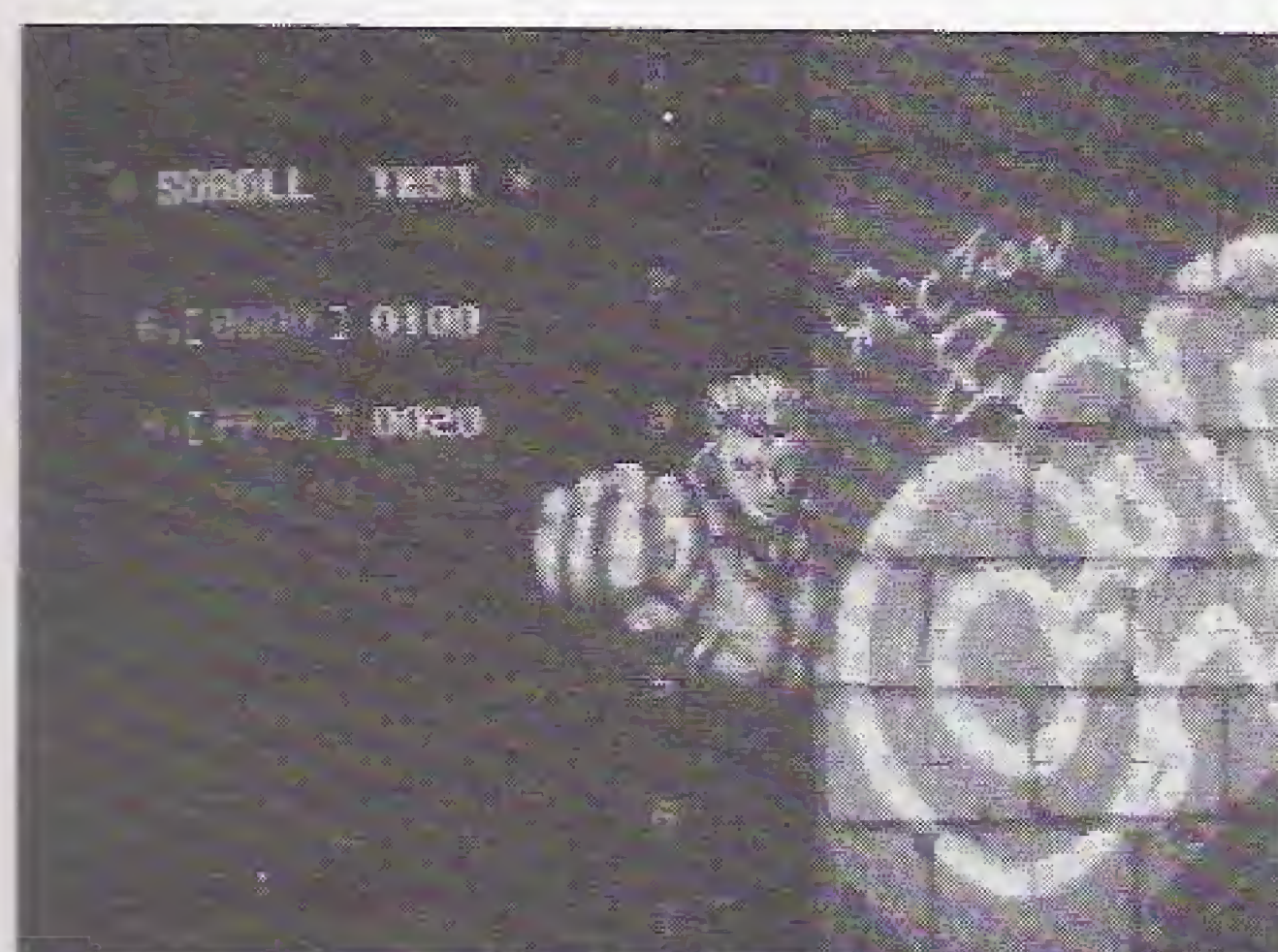


Figure 2-8 Scroll Test Screen

B, [0000] 0100
M, [0000] 0100

(B = Background playfield, M = Main playfield)

Moving the 1-player joystick to the right/left moves the main scroll correspondingly. Moving the 2-player joystick right/left moves the back scroll correspondingly. Moving either joystick up or back controls the speed of

the scroll.

Move the 1-player joystick up and press the Kick button to return to the Self-Test Menu screen.

Output Test

The Output Test screen is shown in Figure 2-9. This screen indicates the condition of the horizontal flip and vertical flip of the video display. The game automatically cycles through the following sequence of events.

The screen displays the character Ryu in the background. In the foreground is displayed *VIDEO CHARACTER OUTPUT* with the letter *P* in a box directly below the heading. If the letter rotates horizontally, vertically, on and then off, the video character output is functioning properly.

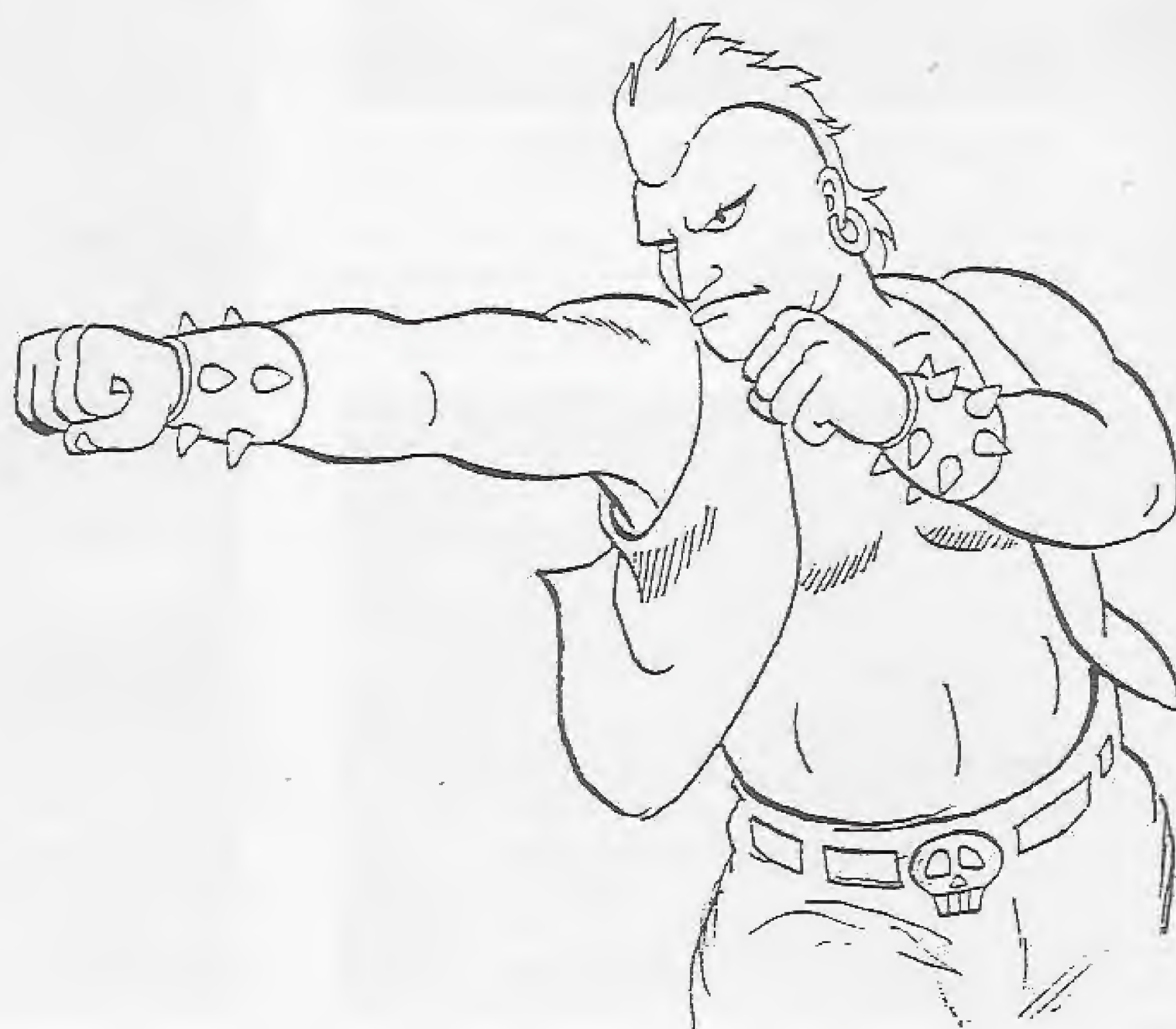
Below the *P* in the box is displayed *OBJECT CHARACTER OUTPUT* with an airplane in a box directly below the heading. If the airplane rotates horizontally, vertically, on and then off, the video character output is functioning properly. After the preceding sequence, the entire screen should automatically flip upside down and then off and on again.

Move the 1-player joystick up and press the Kick button to return to the Self-Test Menu screen.



Figure 2-9 Output Test Screen

N O T E S



Chapter 3

Maintenance



This chapter includes preventive and corrective maintenance procedures for the Street Fighter game components that are subject to the most use. To assure maximum trouble-free operation from this game, we recommend that preventive maintenance be performed as described in this chapter.

Removal and replacement procedures are provided for components that might require corrective maintenance. Chapter 4, Illustrated Parts Lists, can also be used to locate the parts of this game that are mentioned, but not illustrated, in the maintenance procedures.



Preventive Maintenance

Preventive maintenance includes cleaning, lubricating, and tightening hardware. How often preventive maintenance is performed depends upon the game environment and frequency of play. However, for those components listed in Table 3-1 Preventive-Maintenance Intervals, we recommend that preventive maintenance be performed at the intervals specified.

Preventive-Maintenance Intervals

The preventive-maintenance intervals specified in Table 3-1 are the recommended minimum requirements for the components listed.



WARNING



To avoid possible electrical shock, turn off the game before performing any maintenance procedures.

Removing the Control Pod

Typically, the control pod will have to be removed only if the cabinet must be taken through a doorway that is less than 47 inches wide. Perform the following procedure to remove/replace the control pod.

1. Unlock and open the coin door of the cabinet.
2. Use a socket wrench to remove the four split-lock washers, fender washers, and hex-head screws from the four corners on the underside of the pod mounting panel.
3. Disconnect the control harness connectors J1 and J2 from the End PCB.
4. Remove the four color-coded silicone control tubes attached to the *front panel of the junction box* located on the underside of the pod mounting panel.

Table 3-1 Recommended Preventive-Maintenance Intervals

Joystick Control	Lubricate and tighten hardware at least every three months.
Push-Button Leaf Switch	Clean weekly with an electrical contact cleaner.
Coin Mechanism	Inspect whenever you collect coins. Clean at least every three months.

NOTE

Do not remove the four tubes attached to the *rear panel of the junction box*. These are the Game PCB tubes. Also, when reinstalling the four tubes, be sure that each color-coded tube is attached to the appropriate junction-box fitting. The color code for the tubes (from left to right on the front of the junction box) is:

- Blue—1-player Punch control
- Black—1-player Kick control
- Red—2-player Punch control
- Green—2-player Kick control

5. Unlock and open the rear service door.
6. Through the right-side panel opening inside the cabinet, use a socket wrench to remove the split-lock washer, fender washer, and hex-head screw from the vertical mounting panel.
7. Through the left-side panel opening inside the cabinet, use a socket wrench to remove the hex-head screw, split-lock washer, and fender washer from the vertical mounting panel.
8. Use a socket wrench to remove the two hex-head screws, split-lock washers, and fender washers from the vertical mounting panel located below the video display.
9. From the front of the cabinet, remove the control pod from the pod mounting panel.
10. Replace the control pod in the reverse order of removal.

Removing the Control Panel

Perform the following procedure to remove/replace the control panel.

1. Use an Allen wrench to remove the six screws holding the Punch/Kick control panel to the control pod.
2. Carefully lift the control panel out of the pod and place it on top of the pod.

CAUTION

Whenever you lift the control panel out of the pod and onto the top surface of the pod, avoid pinching the silicone tubes.

3. Unlock and open the coin door.
4. Remove the appropriate color-coded silicone control tubes attached to the *front panel of the junction box* located on the underside of the pod mounting panel.

5. Disconnect the joystick control harness from the control panel harness.
6. Replace the control panel in the reverse order of removal.

Cleaning the Push-Button Leaf Switches

Perform the following procedure to clean the push-button leaf switch contacts and tighten the securing hardware. (See Figure 3-1.)

1. Through the coin door opening, remove the appropriate two control tubes from the fittings on the front panel of the junction box.
2. Use an Allen wrench to remove the six screws holding the Punch/Kick control panel to the control pod.
3. Carefully lift the control panel out of the pod and place it on top of the pod.
4. Disconnect the joystick control harness from the control panel harness.
5. Use a $\frac{15}{16}$ -inch open-end wrench to remove the stamped nut holding the push-button leaf switch to the control pod. Grasp the leaf-switch holder.
6. Use electrical contact cleaner to clean the contacts. Do *not* burnish them. When the push button is pressed, the wiping action of the cross-bar contacts provides a self-cleaning feature.
7. Use a $\frac{15}{16}$ -inch open-end wrench to tighten the stamped nut holding the push-button leaf switch to the control pod.
8. Replace the Punch/Kick control panel in the control pod in the reverse order of removal.

Cleaning the Coin Mechanism

Use a soft-bristled brush to remove loose dust or foreign material from the coin mechanism. A toothbrush can be used to remove any stubborn build-up of residue in the coin path. After cleaning the coin mechanism, blow out all of the dust with compressed air.

Cleaning the Interior Components

Perform the following procedure to clean the components inside the cabinet.

⚠ WARNING ⚠

Turn off the game power, but do not unplug the power cord before cleaning inside the cabinet. The power cord provides a ground path for stray static voltages that might be present on the cleaning tools.

1. Unlock and remove the rear access panel.
2. Use a vacuum cleaner with a soft long-bristled brush attachment or a soft-bristled paint brush to remove loose dirt and dust accumulated on the inside of the cabinet. Be sure to clean the electrical components thoroughly (power supplies, PCB assemblies, display, etc.).

CAUTION

Be extremely careful when cleaning the electrical components inside the cabinet. Avoid touching the electrical components with any solid object other than the soft bristles of the vacuum attachment or paint brush.

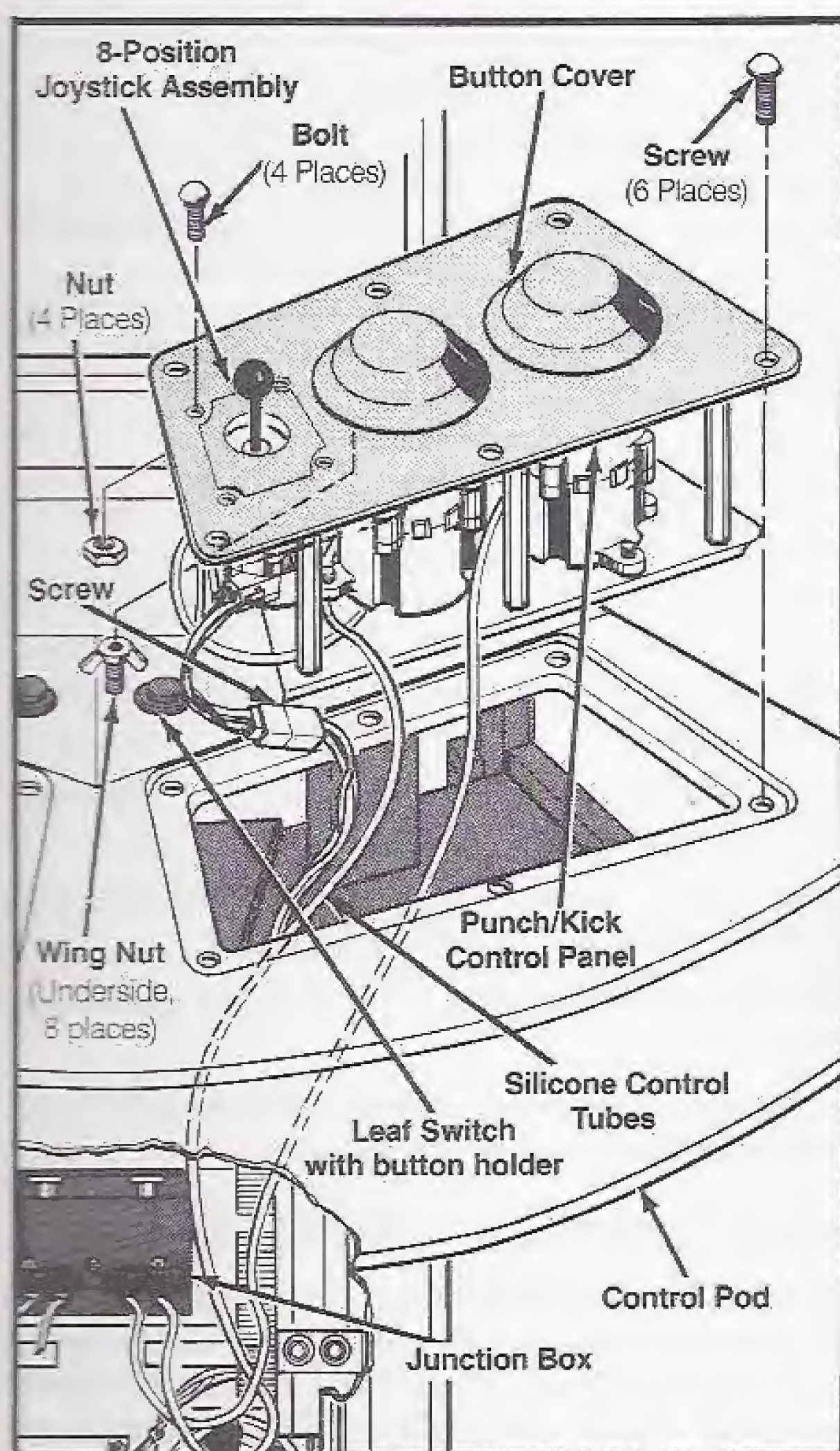


Figure 3-1 Removing the Control-Panel Components

8-Position Joystick Control

Preventive maintenance on the 8-position, snap-switch joystick control consists of inspecting the pivot and ac-

tuator balls for excessive wear or dirt, lubricating the pivot ball, and, if necessary, replacing or tightening the securing hardware.

NOTE

If you need to replace the joystick control, *use only an 8-position joystick*. Using a 4-position joystick will cause the game to respond erratically, resulting in frustrated players and reduced collections.

Lubricating the Joystick Control

Perform the following procedure to lubricate and tighten the 8-position, snap-switch joystick control. (See Figure 3-2.)

1. Through the coin door opening, remove the appropriate two control tubes from the fittings on the front panel of the junction box.

2. Use an Allen wrench to remove the six screws holding the Punch/Kick control panel to the control pod.
3. Gently lift the control panel out of the pod and place it on top of the pod.
4. Using a $\frac{3}{8}$ -inch wrench, remove the four nuts holding the joystick to the control panel.
5. Apply a light film of Lithium grease (CAPCOM part no. 107027-001) to the lubrication points shown in Figure 3-2.
6. Using an appropriate tool, tighten the four screws that hold the positioning plate to the lower housing.
7. Replace the joystick on the control panel and the Punch/Kick control panel on the control pod.
8. Replace the Punch/Kick control panel in the control pod in the reverse order of removal.

Corrective Maintenance

Corrective maintenance consists of removing, disassembling, reassembling, and replacing the push-button leaf switches, joystick controls, game printed-circuit board (PCB), video display, and speakers. The procedures for removing and replacing the Punch/Kick controls and button covers, Game PCB, video display, and speakers follow.

Replacing the Punch/Kick Controls and Button Covers

The entire Punch/Kick control panel, except for the joystick control, must be replaced if the control is defective or malfunctioning. The control panel can be returned, with or without the control tubes, to an authorized CAPCOM distributor. Perform the following procedure to remove/replace the control. (See Figure 3-1.)

Punch/Kick Controls

1. Use an Allen wrench to remove the six screws holding the Punch/Kick control panel to the control pod.
2. Unlock and open the coin door.
3. Remove the appropriate color-coded silicone control tubes attached to the *front panel of the junction box* located on the underside of the pod mounting panel.

NOTE

Do not remove the four tubes attached to the *rear panel of the junction box*. These are the Game PCB tubes. Also, when reinstalling the four tubes, be sure that each color-coded tube is attached to the appropriate junction-box fitting. The color code for the tubes (from left to right on the front of the junction box) is:

Blue—1-player Punch control
Black—1-player Kick control
Red—2-player Punch control
Green—2-player Kick control

4. Carefully lift out the control panel and place it on the control pod.
5. Disconnect the joystick control harness from the control panel harness.
5. Use a $\frac{3}{8}$ -inch wrench to remove the four lock nuts holding the joystick to the control panel.
6. Carefully lift the joystick control out of the control panel.
7. Replace the Punch/Kick control and the joystick control in the reverse order of removal.

Punch/Kick Control Button Covers

The Punch/Kick control button covers (red or blue) might tear or become defective during use. These button covers can be replaced individually without sending the entire control panel to an authorized CAPCOM distributor. Perform the following procedure to remove/replace the button cover. (See Figure 3-1.)

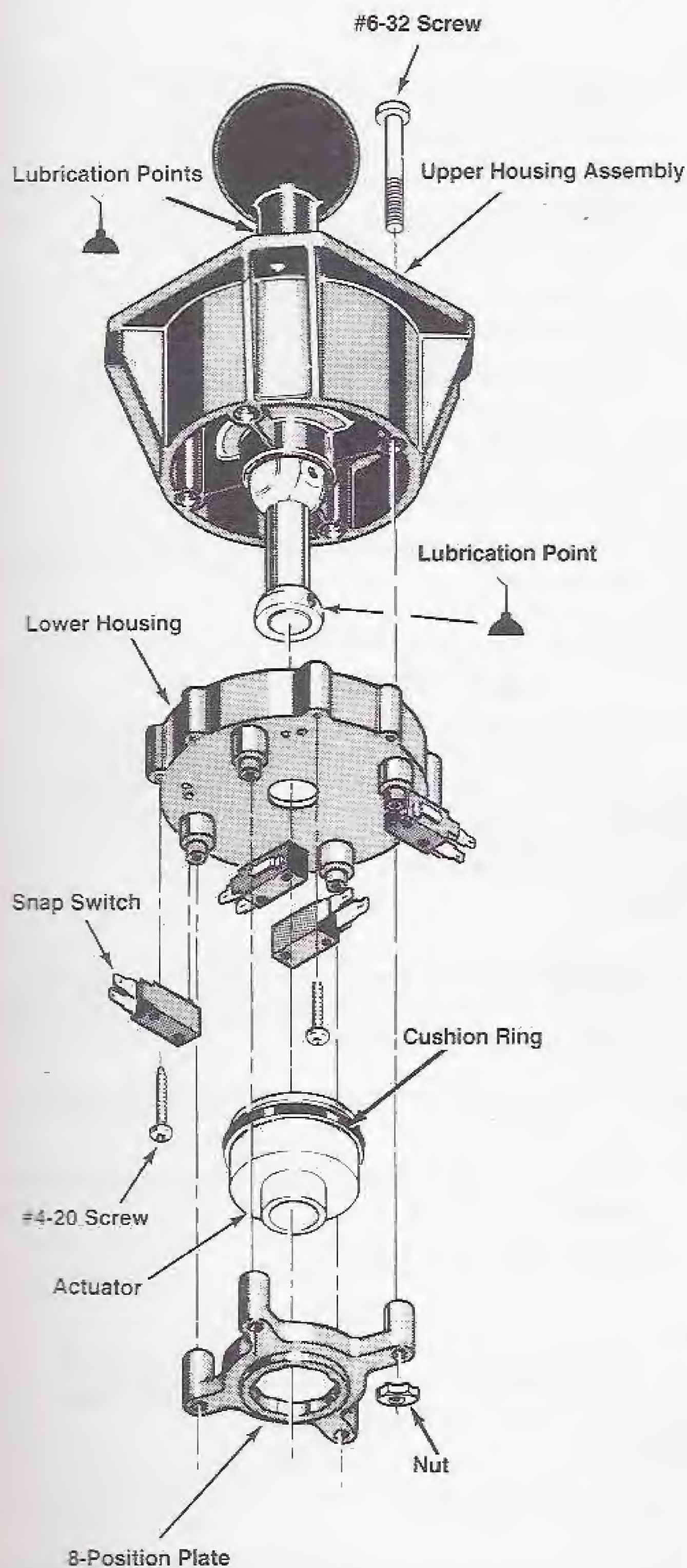


Figure 3-2 8-Position Joystick Lubrication

1. Use an Allen wrench to remove the six screws holding the Punch/Kick control panel to the control pod.
2. Carefully lift the control panel out of the control pod.
3. Remove the four wing nuts (or lock nuts) from the button bolt holding the button cover to the control panel. Remove the button cover.

The CAPCOM part numbers for the covers are as follows: SFP-00-R=Red Button Cover, and SFP-00-B=Blue Button Cover.

4. Replace the button cover in the reverse order of removal.

Replacing the Game PCB Set

The Game PCB is a set of three individual PCBs attached to the mount board in the rear of the cabinet. The entire Mount Board PCB Assembly must be removed from the cabinet to service the Game PCB set. (No individual PCBs will be sold. The entire set of three PCBs must be purchased and replaced.) Perform the following procedure to remove/replace the Mount Board PCB Assembly.

1. Turn the game power off.
2. Unlock and open the coin door.
3. Disconnect the eight harness connectors and leads from the End PCB and the Game PCB. (Refer to the Harness Installation diagram on page 58 in the Schematic Package.)
4. Disconnect the four silicone tubes from the Game PCB.
5. Unlock and remove the lower rear service door.
6. Use a Phillips screwdriver to remove the two screws holding the Mount Board PCB Assembly. This assembly is located on the right-side panel of the cabinet.
7. Grasp the back edge of the Mount Board PCB Assembly and gently slide it backwards out of the cleat and through the service door.

NOTE

When reinstalling the Mount Board PCB Assembly, be sure that the mount board is aligned flush with the end of the mounting cleat before installing the screws.

8. Replace the Mount Board PCB Assembly in the reverse order of removal.

NOTE

When reinstalling the Mount Board PCB Assembly, be sure to reconnect all of the harness connectors and leads as follows:

Designator	Harness/Lead	PCB
CN5	Main harness (audio connector)	Game
J1	Control harness (Player 2)	End
J2	Control harness (Player 1)	End
J3	Main harness (video connector)	End
J4	Power supply harness	End
J5	Coin door harness	End
CC1	Coin counter lead	End
CC+	Coin counter lead	End

Replacing the Video Display and Speakers

Perform the following procedure to remove/replace the video display and the speakers. (See Figure 3-3.)

Removing the Video Display

1. Turn the game power off and wait two minutes. Unplug the power cord.
2. Use a 1/8-inch hex driver to remove the three screws holding the display shield retainer to the cabinet.
3. Grasp the display shield on the top edge and gently pull it out from the cabinet.
4. Carefully remove the bezel from the foam tape holding it in place.
5. Use a Phillips screwdriver to remove the six screws holding the two bezel cleats to the cabinet. Remove the cleats.
6. Use a Phillips screwdriver to remove the eight screws holding the display service door. Remove the door.
7. Unlock and open the lower rear service door.

**WARNING****High Voltage**

The video display contains potentially lethal high voltages. To avoid injury, do not attempt to service this display until you observe all precautions necessary for working on high-voltage equipment.

X-Radiation

The video display has been designed to minimize X-radiation. However, to avoid possible exposure to soft X-radiation, *never* modify the high-voltage circuitry.

Implosion Hazard

The cathode-ray tube may implode if struck or dropped. Shattered glass may cause injury within a 6-foot radius. Use care when handling the display.

8. Be sure that the game power is turned off before discharging the high-voltage from the cathode-ray tube (CRT) before proceeding. The display assembly contains a circuit for discharging the high voltage to ground when power is removed. However, to make certain, always discharge the display as follows.
 - a. Attach one end of a large, well-insulated, 18-gauge jumper wire to ground.
 - b. Momentarily touch the free end of the grounded jumper to the CRT anode by sliding it under the anode cap.
 - c. Wait two minutes and repeat part b.
9. Disconnect the display signal and the display power connectors.

**WARNING**

To avoid dropping the video display, use extreme care when removing the display from the cabinet. We recommend that no one weighing less than 150 pounds should attempt to remove the video display. In addition, we recommend that you wear gloves to protect your hands from the sheet-metal edges.

10. From the front of the cabinet, use a Phillips screwdriver to remove the six screws and washers holding the display to the cabinet.
11. Carefully slide the display out through the front of the cabinet.
12. Replace the video display in the reverse order of removal.

NOTE

Whenever the cathode-ray tube is replaced, readjust the brightness, purity, and convergence as described in the display manual.

Replacing the Speakers

Perform the following procedure to remove/replace the speakers. (See Figure 3-3.)

1. Turn the game power off, if not already done.
2. Perform steps 2 and 3 of *Removing the Video Display*, if not already done.
3. Use a 1/8-inch hex driver to remove the six screws holding the speaker grille to the top of the cabinet.
4. Disconnect the speaker harness assembly.

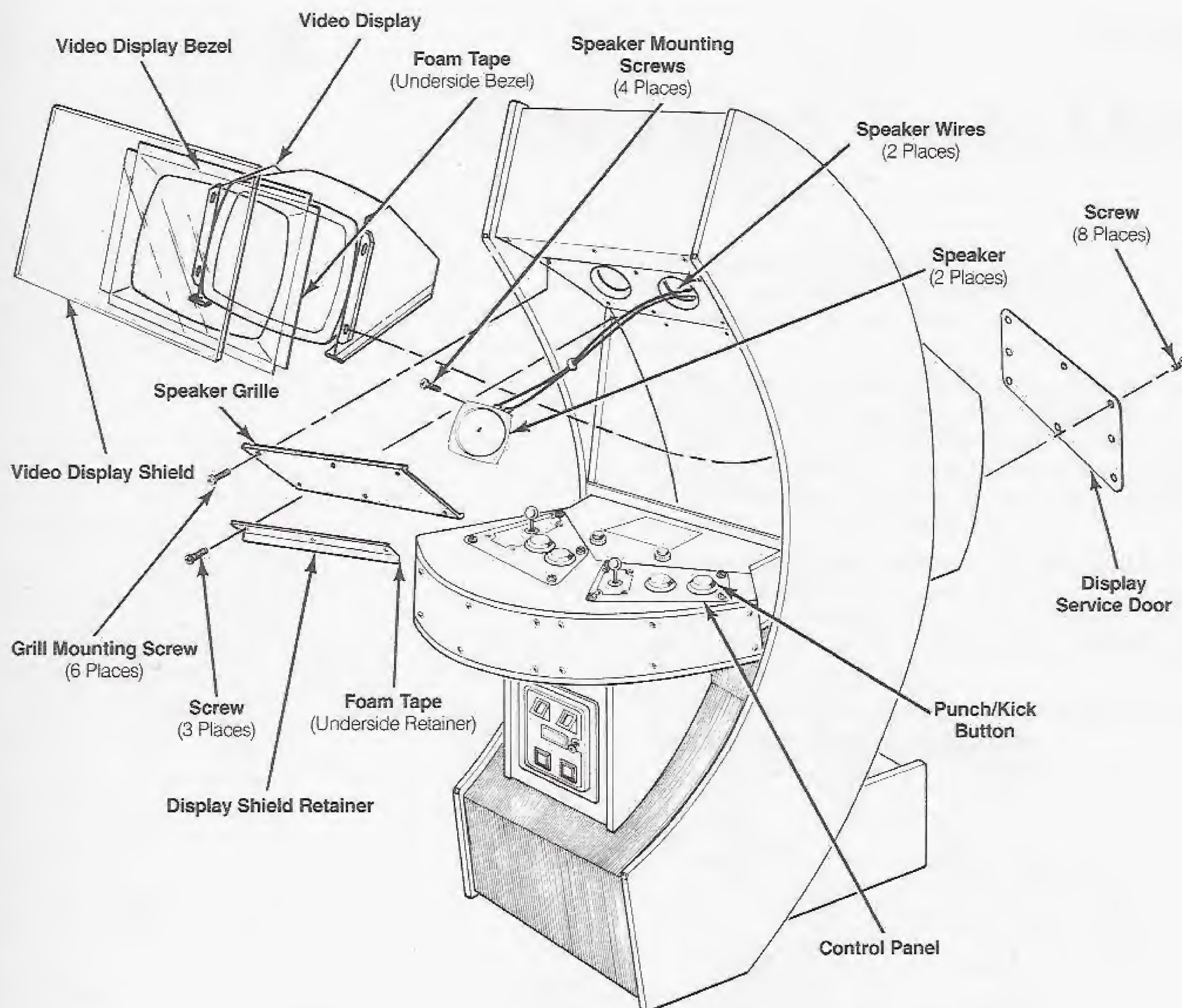


Figure 3-3 Replacing the Video Display and Speakers

CAUTION

Do not touch the speaker cones when handling the speakers. The cone material is fragile and can be easily damaged.

5. Use a Phillips screwdriver to remove the four screws holding the speaker to the cabinet. Do not let the speaker fall.
6. Lower the speaker just far enough to disconnect the two speaker wires. When reinstalling the speakers, be sure that you hook up the wires correctly. Otherwise, the game will produce less than the desired volume because the speakers will be out of phase.
The signal wire on each speaker should be attached to the speaker tab marked with color, a + sign, or a round dot. (The signal wires are shown on the game wiring diagram in the Schematic Package included with the game.)
7. Replace the speaker in the reverse order of removal.

N O T E S



Illustrated Parts Lists

This chapter provides information you need to order parts for your game. Common hardware (screws, nuts, washers, etc.) has been deleted from most of the parts lists.

All parts lists except the those for the three game printed-circuit boards are arranged alphanumerically by part number. In these parts lists, all A-prefix numbers appear first. Following these are numbers in sequence evaluated up to the hyphen, namely 00- through 99-, then 000598- through approximately 201000-.

When ordering parts, please give the part number, part name, number of this manual, and serial number of your game. This will help us fill your order rapidly and correctly. We hope the results will be less downtime and more profit from your game.

The CAPCOM USA Customer Service number is listed on the inside front cover of this manual.

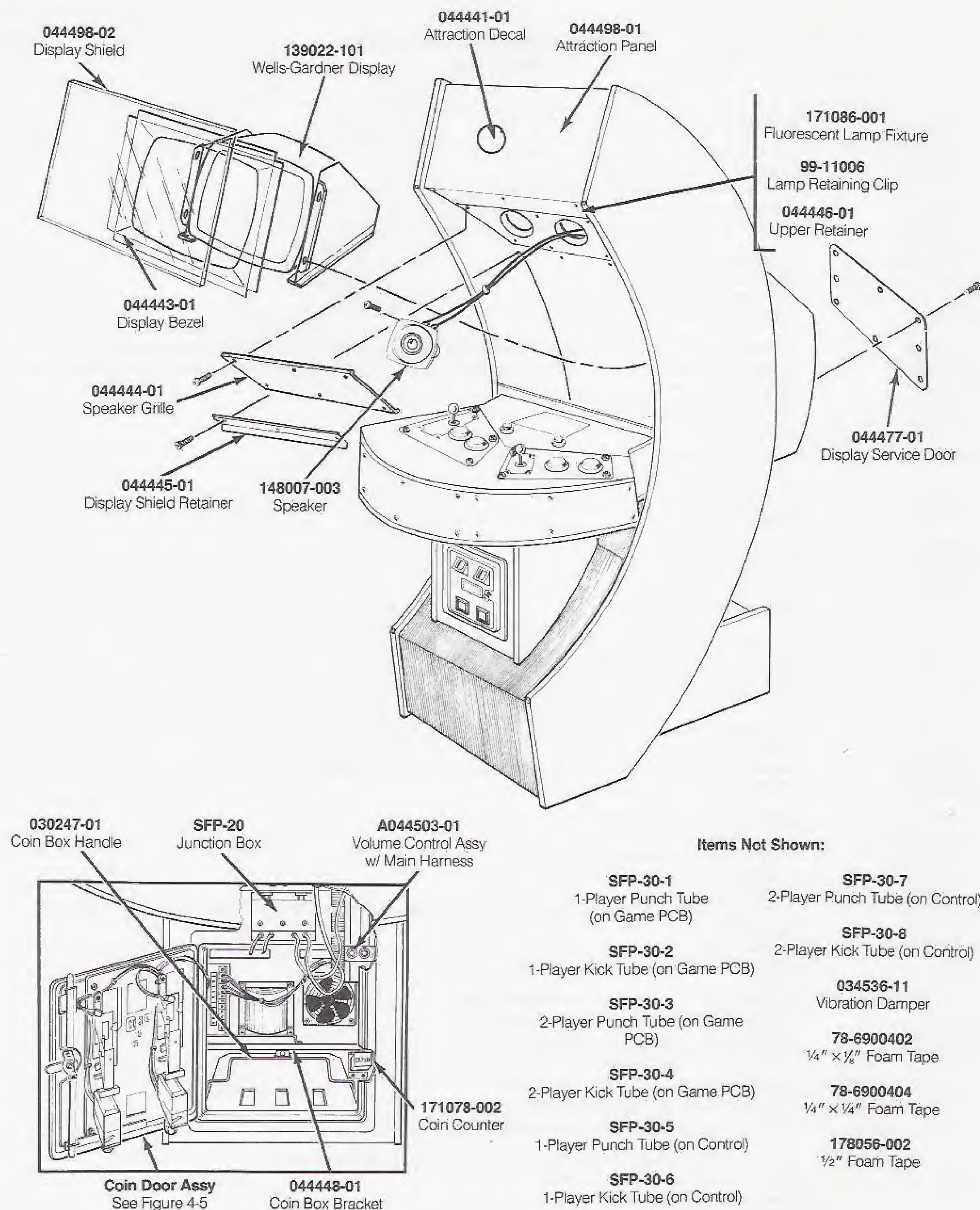


N O T E S



Cabinet-Mounted Assemblies Parts List

Part No.	Description
A043705-01	12-Inch Fan Cord Assembly
A043910-01	On/Off Switch Assembly with Harness
A044470-01	Cabinet Assembly
A044503-01	Volume Control Assembly with Main Harness
A044505-01	AC Harness Assembly
A044506-01	Coin Harness Assembly
A044522-01	PCB Base Subassembly
78-3201	Adjustable Glide
78-6900402	¼-Inch × ⅛-Inch Thick Foam Tape (78 inches required; used on inside edge of upper retainers)
78-6900404	¼-Inch × ¼-Inch Thick Foam Tape (26 inches required; used on cabinet below video display facing back edge of control pod)
99-11006	Fluorescent Lamp Retaining Clip
021699-01	Coin Box Lid
030247-01	Coin Box Handle
034536-11	.81-Inch Thick Vibration Damper
035941-01	Coin Box
037332-01	Louvered Grille
044441-01	Attraction Decal
044443-01	Display Bezel
044444-01	Speaker Grille
044445-01	Display Shield Retainer
044446-01	Upper Retainer
044448-01	Coin Box Bracket
044477-01	Display Service Door
044495-01	Service Door
044498-01	Attraction Panel
044498-02	Display Shield
139022-101	Wells-Gardner 25-Inch Standard-Resolution Color Raster Display, Model 25K5501
148007-003	4½-Inch, 8 Ω, 10 W, Unshielded Speaker
170003-001	15 W, 18-Inch Fluorescent Lamp
171002-001	110 V, 70 CFM Exhaust Fan
171078-002	12 VDC Non-Resettable Coin Counter
171086-001	18-Inch Fluorescent Lamp Fixture
178056-002	½-Inch × ⅛-Inch Thick Foam Tape (4 inches required; two inches used underneath each side of bezel)
178093-001	Fan Guard
SFP-20	Junction Box
SFP-30-1	1-Player Punch Silicone Tube (on Game PCB)
SFP-30-2	1-Player Kick Silicone Tube (on Game PCB)
SFP-30-3	2-Player Punch Silicone Tube (on Game PCB)
SFP-30-4	2-Player Kick Silicone Tube (on Game PCB)
SFP-30-5	1-Player Punch Silicone Tube (on Control)
SFP-30-6	1-Player Kick Silicone Tube (on Control)
SFP-30-7	2-Player Punch Silicone Tube (on Control)
SFP-30-8	2-Player Kick Silicone Tube (on Control)
<i>The following are technical information supplements for this game:</i>	
TM-306	Street Fighter Operator's Manual
SP-306	Street Fighter Schematic Package
ST-306	Street Fighter Self-Test Label
TM-307	Wells-Gardner Model 25K5501 Video Display Service Manual



**Figure 4-1 Cabinet-Mounted Assemblies
A044500-01 D**

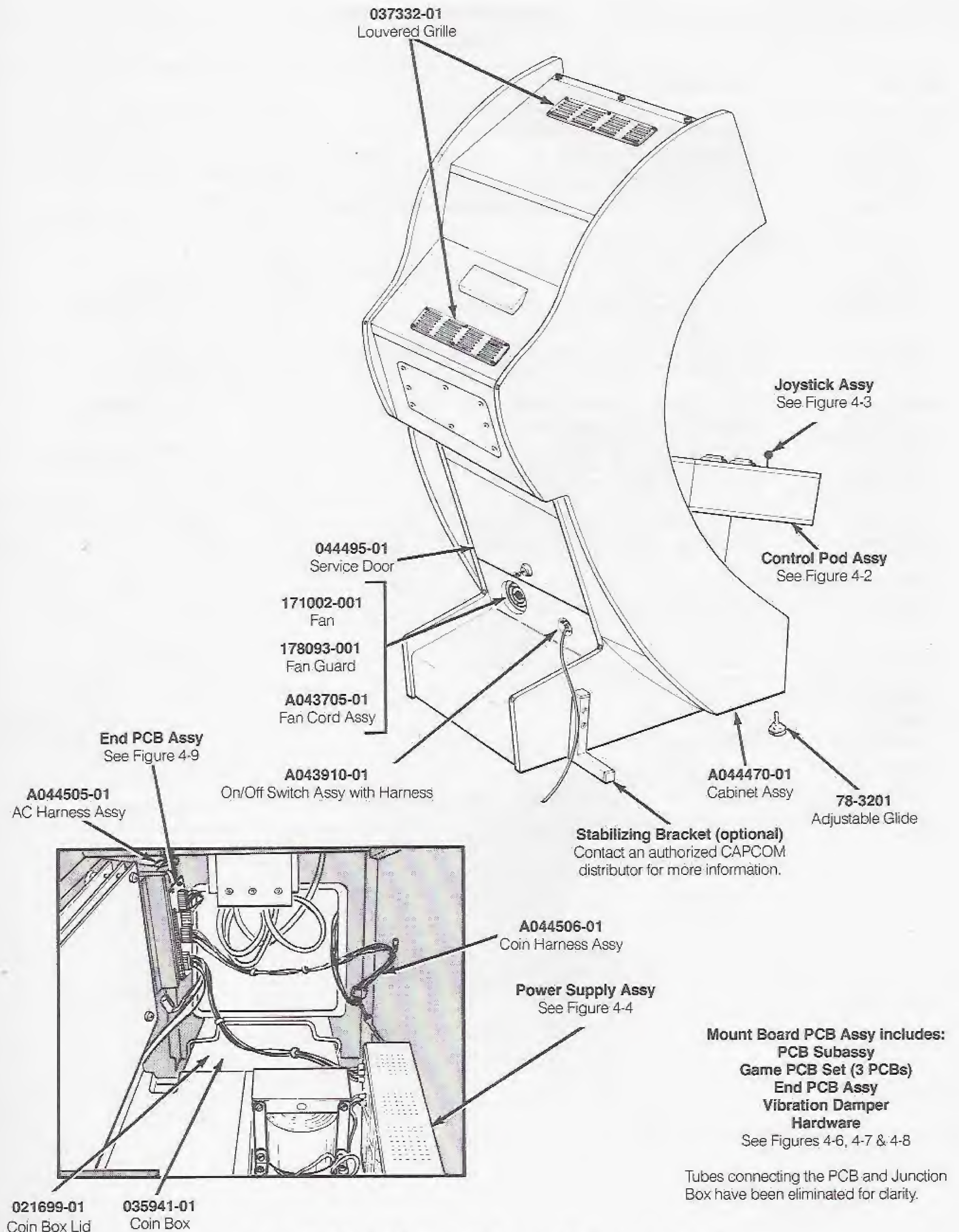
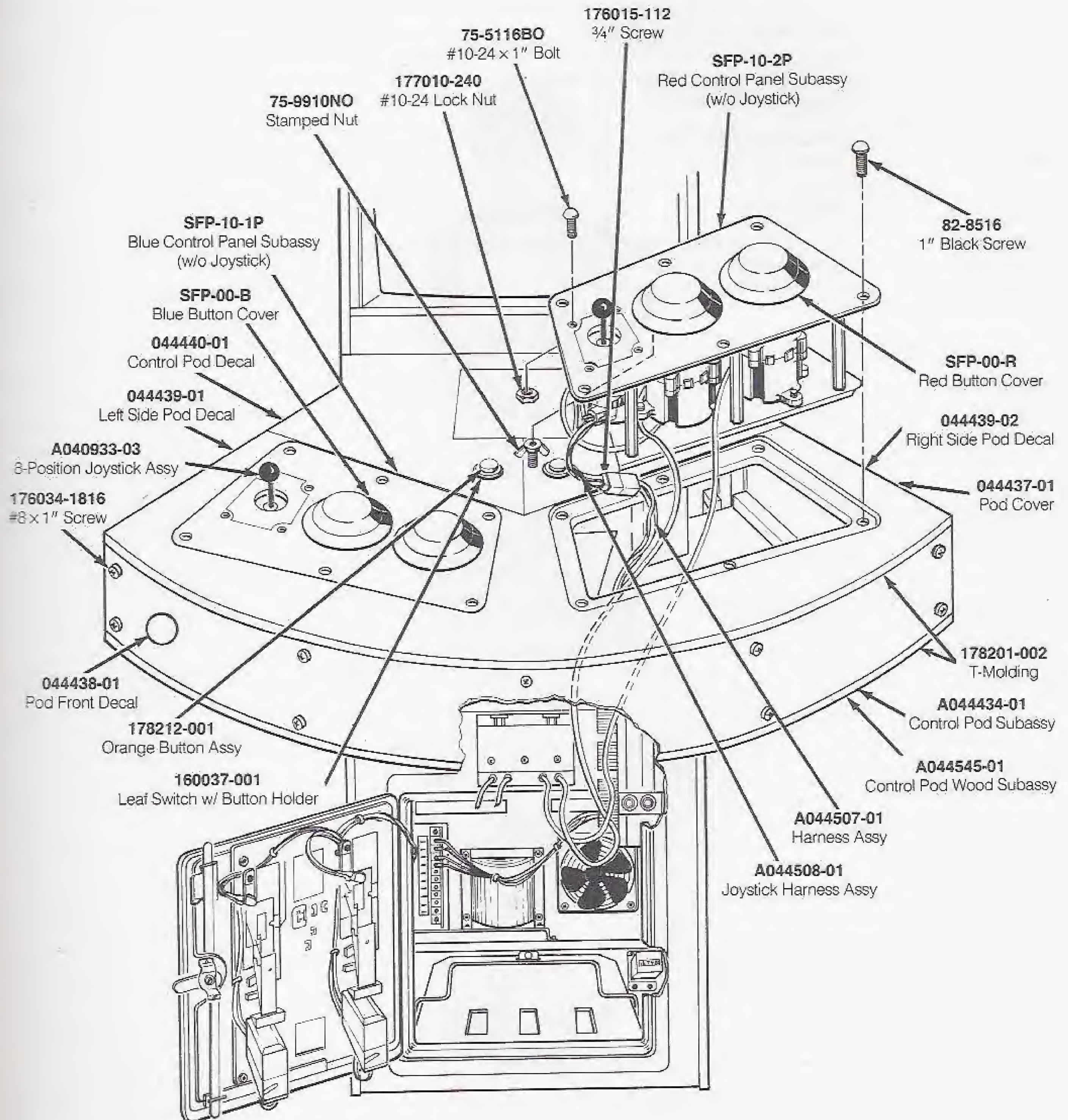


Figure 4-1 Cabinet-Mounted Assemblies, Continued
A044500-01 D

Control Pod Assembly Parts List

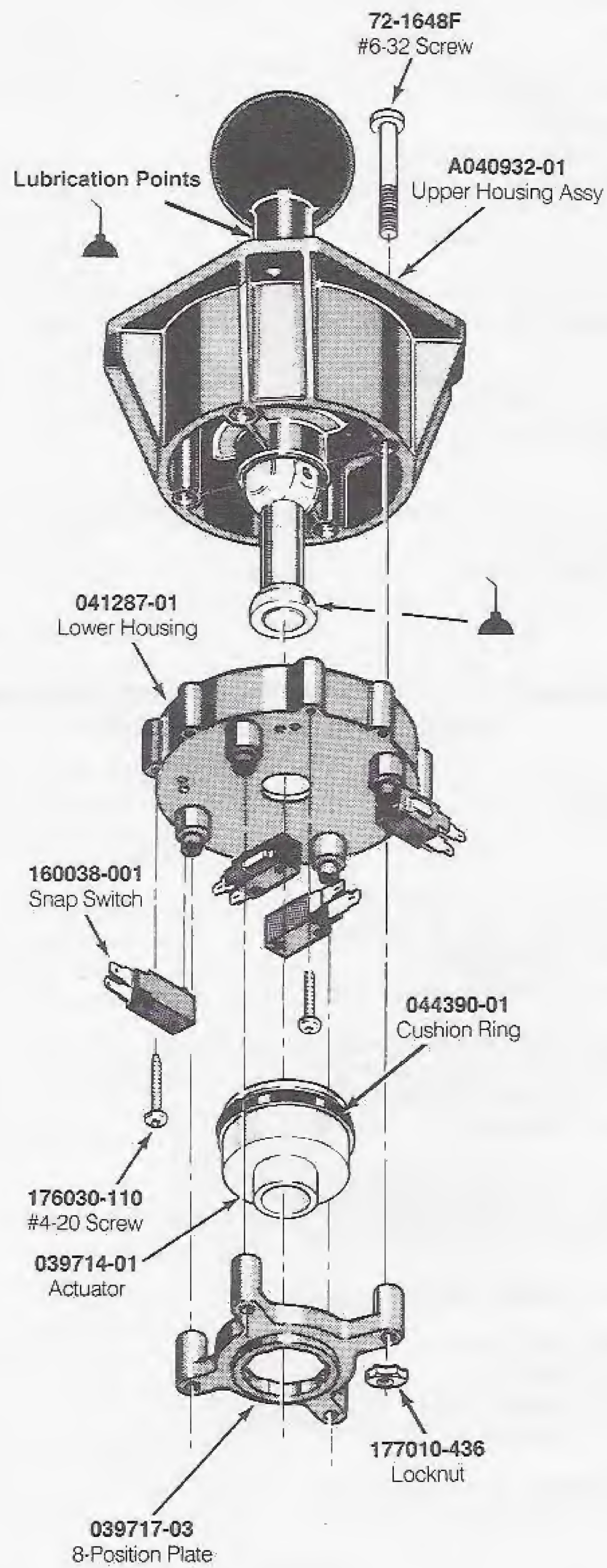
Part No.	Description
A044436-01	Control Pod Assembly, consisting of:
A044434-01	Control Pod Subassembly
A044507-01	Control Panel Harness Assembly
SFP-10-1P	Blue Control Panel Subassembly (does not include joystick)
SFP-10-2P	Red Control Panel Subassembly (does not include joystick)
75-9910NO	#11- $\frac{5}{8}$ -Inch Stamped Nut
82-8516	# $\frac{1}{4}$ -20 \times 1.00-Inch-Long Black Button-Head Hex-Socket Machine Screw
044440-01	Control Pod Decal
160037-001	Cross-Bar Leaf Switch with Button Holder
176015-112	#10 \times $\frac{3}{4}$ -Inch Cross-Recessed Pan-Head Tapping Screw
178212-001	1 $\frac{1}{8}$ -Inch Orange Button Assembly
A044435-xx	Control Panel Assembly, consisting of:
A040933-03	Snap-Switch Joystick Assembly
A044508-01	Joystick Harness Assembly
SFP-10-1P	Blue Control Panel Subassembly
SFP-10-2P	Red Control Panel Subassembly
75-5116BO	#10-24 \times 1-Inch Long Black Carriage Bolt
177010-240	#10-24 Reg. Polymer Lock Hex Lock Nut
Additional part numbers:	
SFP-00-B	Blue Button Cover
SFP-00-R	Red Button Cover
A044434-01	Control Pod Subassembly, consisting of:
A044545-01	Control Pod Wood Subassembly
044437-01	Pod Cover
044438-01	Pod Front Decal
044439-01	Left Side Pod Decal
044439-02	Right Side Pod Decal
176034-1816	#8 \times 1.00-Inch Black Low Profile Washer Hex-Socket Screw
178201-002	$\frac{13}{16}$ -Inch Chrome T-Molding



**Figure 4-2 Control Pod Assembly
A044436-01 A**

8-Position Joystick Assembly Parts List

Part No.	Description
72-1648F	#6-32×3-Inch-Long Phillips Pan-Head Screw
A040932-01	Upper Housing Assembly
039714-01	Actuator
039717-03	8-Position Positioner Plate
041287-01	Lower Housing
044390-01	Cushion Ring
160038-001	Snap Switch
176030-110	#4-20×.62-Inch-Long Self-Tapping Hex Washer-Head Screw
177010-436	#6-32 Polymer Hex Nut



**Figure 4-3 8-Position Joystick Assembly
A040933-03 D**

Switching/Linear (SL) Power Supply Assembly Parts List

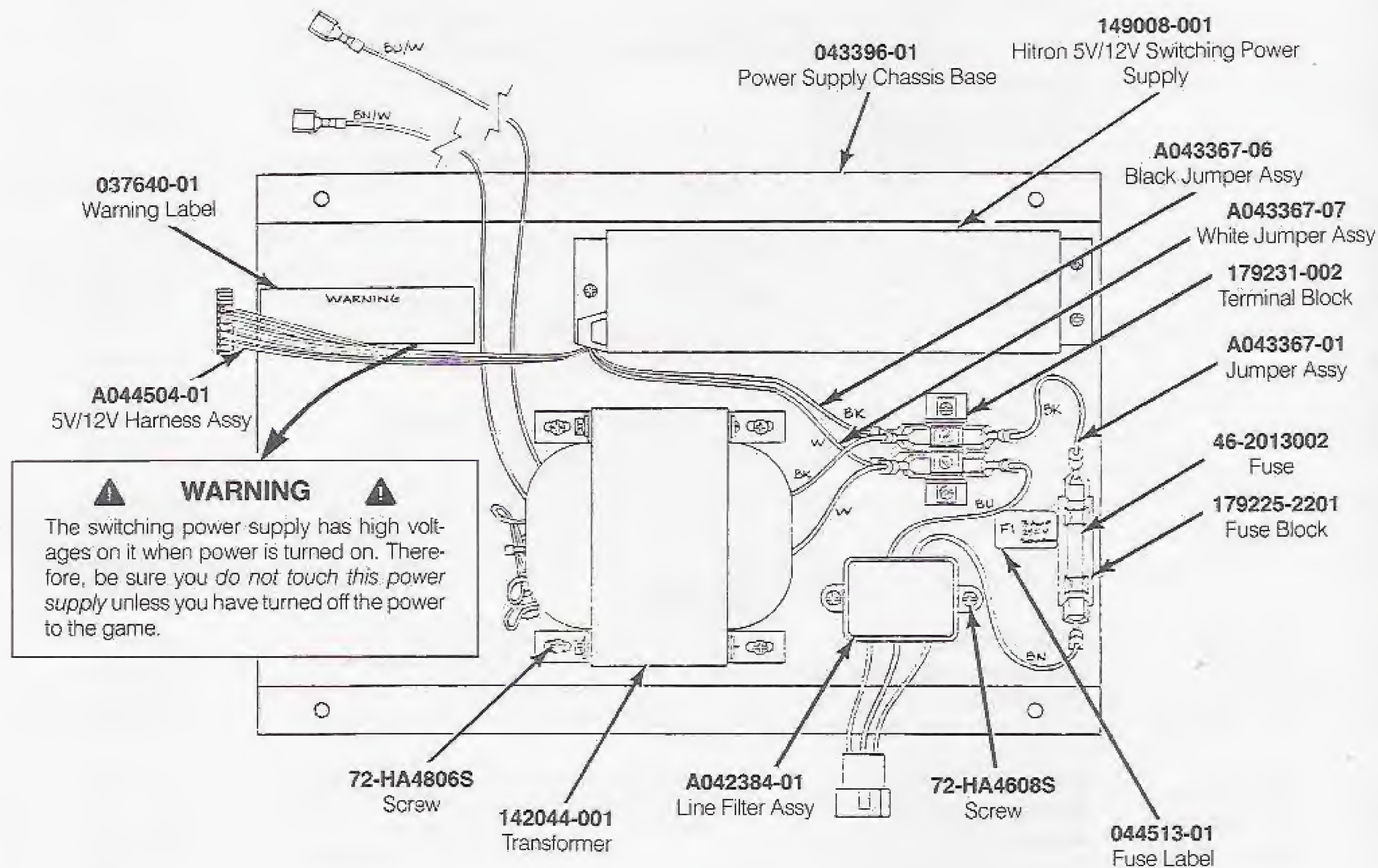
Part No.	Description
A042384-01	Line Filter Assembly
A043367-01	Jumper Assembly
A043367-06	9-Inch Black Jumper Assembly
A043367-07	9-Inch White Jumper Assembly
A044504-01	5 V/12 V Harness Assembly
46-2013002	250 V Slow-Blow 3 A Fuse
72-HA4608S	#6-32×1/2-Inch Cross-Recessed Pan-Head Thread-Forming Screw
72-HA4806S	#8-32×3/8-Inch Cross-Recessed Pan-Head Thread-Forming Screw
037640-01	Power Supply Warning Label
043886-01	Power Supply Chassis Base
044513-01	Power Supply Fuse Label
142044-001	Transformer
149008-001	Hitron 5 V/12 V Switching Power Supply (see parts list below)
179225-2201	1-Position Fuse Block
179231-002	2-Position Terminal Block

Hitron 5 V/12 V Power Supply Sub-Assembly Model HSA-122C Parts List

Designator	Description	Part No.
Capacitors		
C1	Capacitor, Metal Film, 0.047 μ F, 250 V	99-211036
C2	Capacitor, Metal Film, 0.1 μ F, 400 V	99-211038
C3, C4	Capacitor, DE7100F22M	99-211079
C5, C6	Capacitor, Electrolytic, 100 μ F, 200 V	99-211046
C7	Capacitor, Metal Film, 0.1 μ F, 400 V	99-211038
C8	Capacitor, Ceramic, 0.001 μ F, 2 kV	99-211042
C9	Capacitor, Ceramic, 0.01 μ F, 1 kV, Z5U	99-211041
C10	Capacitor, 220 μ F, 16 V	99-211082
C11	Capacitor, Metal Film, 0.22 μ F, 100 V	99-211037
C12	Capacitor, Metal Film, 0.022 μ F, 100 V	99-211039
C13	Capacitor, Metal Film, 0.22 μ F, 100 V	99-211037
C14	Capacitor, Ceramic, 1800 pF, 2 kV, Z5V	99-211040
C19	Capacitor, 470 μ F, 25 V	99-211081
C20	Capacitor, 1000 μ F, 35 V	99-211080
C21	Capacitor, Ceramic, 470 pF, 1 kV, Z5P	99-211043
C22	Capacitor, Electrolytic, 2200 μ F, 16 V	99-211069
C23	Capacitor, Electrolytic, 1000 μ F, 25 V	99-211047
C24	Capacitor, Electrolytic, 2200 μ F, 16 V	99-211069
Diodes		
D1, D2	Diode, Fast Recovery, RPG10K	99-211010
D3	Diode, Fast Recovery, RPG15B	99-211011
D4	Diode, Fast Recovery, RPG10B	99-211009
D5-D7	Diode, Switching, 1N4148	99-211012

**Hitron 5 V/12 V Power Supply Sub-Assembly
Model HSA-122C Parts List, Continued**

D10	Diode, 31DQ04	99-211076
D11, D12	Diode, Schottky, S10SC4M	99-211005
D13-D16	Diode, Rectifier, 1N4006	99-211008
Inductors		
L1	Inductor, 60 mH	99-211088
L2	Inductor, 9.8 μ H	99-211085
L3	Inductor, 8 μ H	99-211084
L4	Inductor, 2.2 μ H	99-211087
L5	Inductor, 0.75 mH	99-211086
Transistors		
Q1	Transistor, NPN, 2SC1413 A	99-211002
Q2	Transistor, NPN, PE8050B	99-211003
Q3	Transistor, PE8550B	99-211063
Resistors		
R1, R2	Resistor, 120K Ω , 1 W, $\pm 5\%$	99-211078
R3	Resistor, Wirewound, 120 Ω , $\pm 5\%$, 2 W	99-211019
R4	Resistor, Wirewound, 0.47 Ω , $\pm 5\%$, 2 W	99-211018
R5	Resistor, Wirewound, 33 Ω , $\pm 5\%$, 2 W	99-211017
R6, R7	Resistor, Carbon Film, 5.6 Ω , $\pm 5\%$, $\frac{1}{4}$ W	99-211027
R8	Resistor, Wirewound, 0.47 Ω , $\pm 5\%$, 2 W	99-211018
R9	Resistor, Carbon Film, 10 Ω , $\pm 5\%$, $\frac{1}{4}$ W	99-211029
R10	Resistor, Carbon Film, 1K Ω , $\pm 5\%$, $\frac{1}{4}$ W	99-211032
R11	Resistor, Carbon Film, 47 Ω , $\pm 5\%$, $\frac{1}{4}$ W	99-211025
R12	Resistor, Carbon Film, 5.6 Ω , $\pm 5\%$, $\frac{1}{4}$ W	99-211027
R13	Resistor, Carbon Film, 330 Ω , $\pm 5\%$, $\frac{1}{4}$ W	99-211026
R14	Resistor, Carbon Film, 270 Ω , $\pm 5\%$, $\frac{1}{2}$ W	99-211023
R15	Resistor, 470 Ω , $\frac{1}{2}$ W, $\pm 5\%$	99-211077
R16	Resistor, Carbon Film, 8.2 Ω , $\pm 5\%$, $\frac{1}{4}$ W	99-211028
R17, R18	Resistor, Carbon Film, 56 Ω , $\pm 5\%$, $\frac{1}{4}$ W	99-211031
R19	Resistor, Carbon Film, 39 Ω , $\pm 5\%$, $\frac{1}{4}$ W	99-211030
R20	Resistor, Carbon Film, 2K Ω , $\pm 5\%$, $\frac{1}{4}$ W	99-211035
R21	Resistor, Carbon Film, 470 Ω , $\pm 5\%$, $\frac{1}{4}$ W	99-211024
R22	Resistor, 2.2K Ω , $\pm 2\%$, $\frac{1}{4}$ W	99-211021
R23	Resistor, Metal Film, 2K Ω , $\pm 2\%$, $\frac{1}{4}$ W	99-211033
R24	Resistor, Wirewound, 150 Ω , $\pm 5\%$, 2 W	99-211016
R25	Resistor, Carbon Film, 10 Ω , $\pm 5\%$, $\frac{1}{4}$ W	99-211029
R26	Resistor, Wirewound, 27 Ω , $\pm 5\%$, 2 W	99-211065
Transformers		
T1	Transformer, 4.75 mH	99-211089
T2	Transformer, Power	99-211083
Miscellaneous		
IC1	Regulator, UA431AWC	99-211001
SCR	Thyristor, SCR, S2800	99-211013
TR1	Thermistor, 0.5 Ω , $\pm 5\%$, 5 W	99-211020
VR1	Potentiometer, Trimming, 3K Ω	99-211014
ZD1	Diode, Zener, 1N752 A	99-211007
	Heat Sink	99-211059
	Heat Sink, 1.5 mm	99-211061



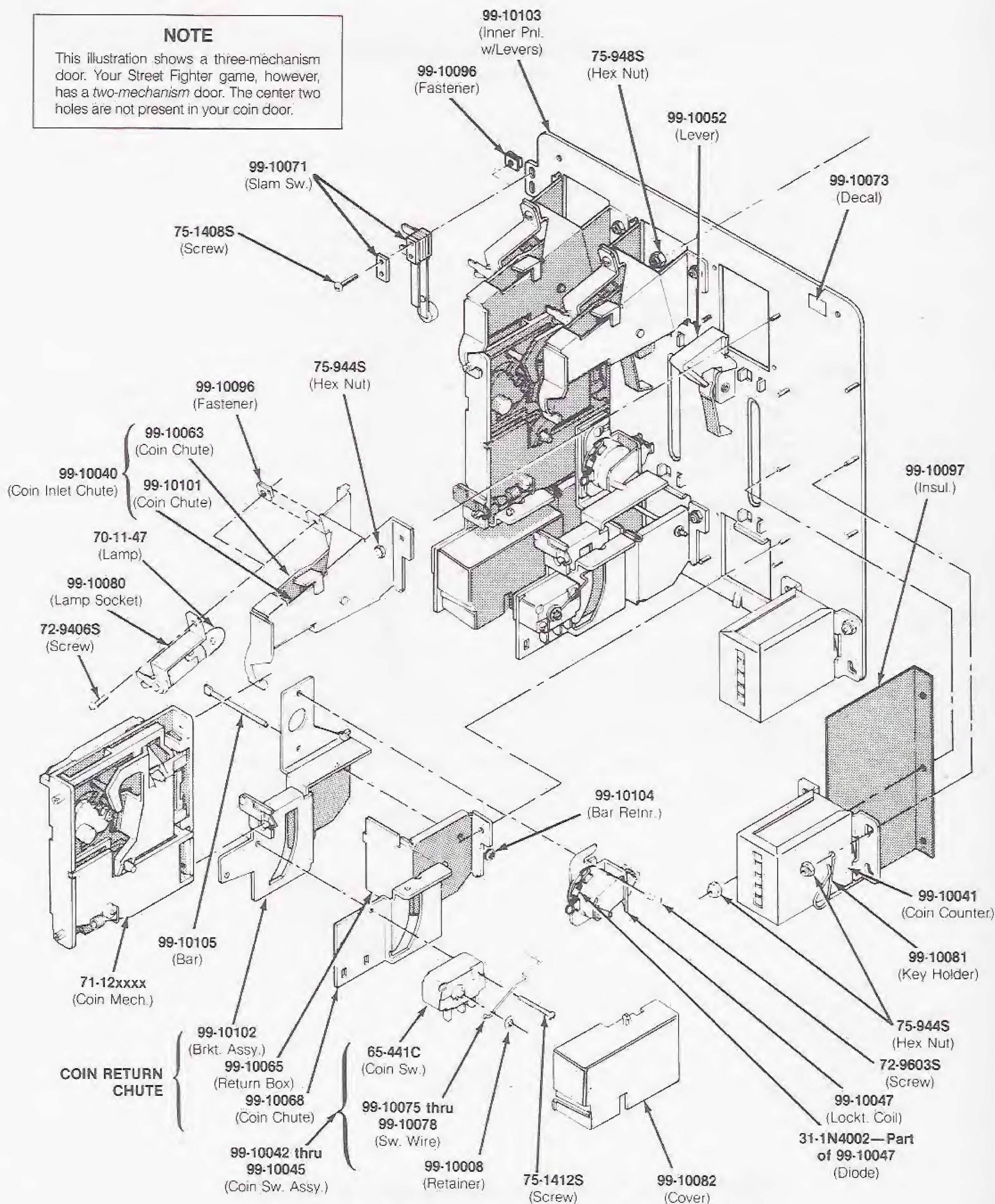
**Figure 4-4 Switching/Linear (SL) Power Supply Assembly
A044511-01 B**

**Coin Acceptors, Inc. Coin Door Assembly
Parts List**

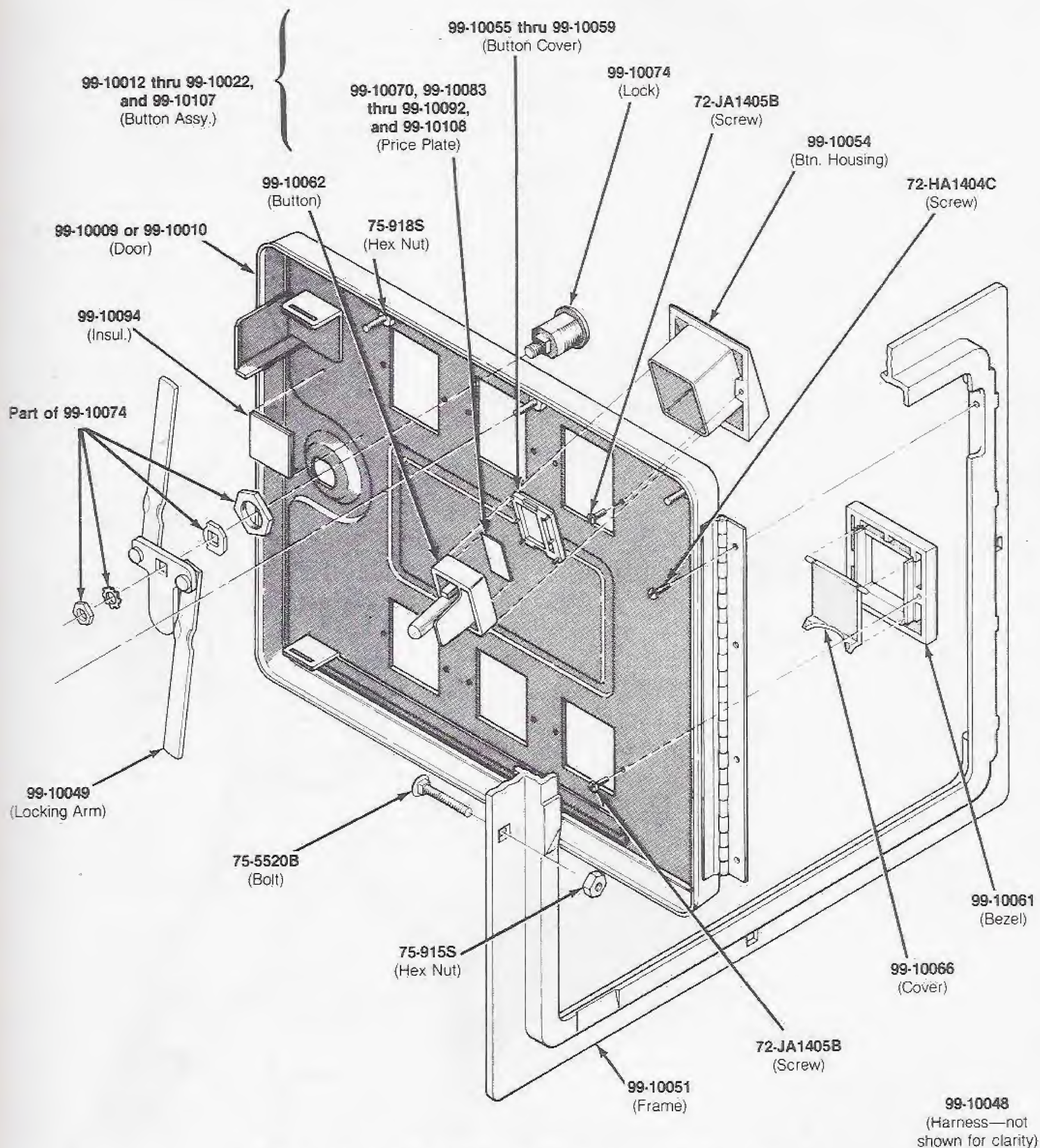
Part No.	Description
99-10008	Retainer, Switch Wire
99-10009	Sub-Assy, Coin Door (Two-Acceptor)
99-10011	Inner Panel Assembly
99-10042	Switch & Wire Assy, 5 FR/25 C (BEL/USA)
99-10051	Frame, Door
99-10068	Chute, Coin
99-10075	Wire, Switch, 100 Y/1 FR/1 DM (JPN/CH/GER)
99-10080	Socket, Miniature Bayonet Lamp
99-10104	Keeper
99-10105	Bar, APF
99-10115	Spring, Button Return
99-10117	Door, Coin Return, Steel
99-10141	Cover, Coin Return
99-10146	Assy, Coin Inlet Chute
99-10150	Cover, Switch
99-10153	Box, Bottom Coin Return, With Anti-Probe Flange
99-10158	Bezel, Coin Inlet
99-10159	Assy, Button
99-10160	Lock
99-10161	Arm, Pivot
99-10162	Arm, Locking
99-10163	Lamp, 6.3V
99-10164	Lever, Coin Return
99-10165	Acceptor, Coin, 25-Cent USA
99-10166	Bracket, Switch/CREM
99-10167	Switch, Coin
99-10168	Harness

NOTE

This illustration shows a three-mechanism door. Your Street Fighter game, however, has a *two-mechanism* door. The center two holes are not present in your coin door.



**Figure 4-5 Coin Acceptors, Inc. Coin Door Assembly
171084-001**



**Coin Acceptors, Inc. Coin Door Assembly, continued
Parts List**

N O T E S



Street Fighter Game PCB Assembly (Board A) Parts List

Item No.	Part No.	Description	Reference Designator
5	Z80-A	CPU 4MHz	3K, 4K
7	27C301G	1M EPROM	1K, 1H
9	27256-25	256K EPROM	7K
11	TMM2015-12	16K SRAM	5K
12	TMM2018-45	8K SRAM	9F, 10F
13	YM-2151	OPL	3H
14	YM-3012	DA CONV	3F
15	7603	BIPOLAR PROM	13H
16	7611	BIPOLAR PROM	12J, 12K
17	74LS00	LSTTL	11F, 15L
18	74LS04	LSTTL	5F
19	74LS07	LSTTL	9K
20	74LS08	LSTTL	11K
23	74LS32	LSTTL	12C, 12F
24	74LS74A	LSTTL	8K, 10H, 10J, 10K, 11J, 12L, 13L
26	74LS138	LSTTL	13C, 13E, 14C, 15C
27	74LS139	LSTTL	11L
28	74LS157	LSTTL	13F, 14F, 15F
29	74LS161A	LSTTL	13J, 13K, 14J, 14K
31	74LS174	LSTTL	2H, 11H, 12-14B, 1F, 2F
33	74LS245	LSTTL	12D, 14D, 15D, 4E, 6E, 9E, 11E, 14E, 15E, 15J, 15K
35	74LS273	LSTTL	12H, 14L, 15B
37	74LS367A	LSTTL	13D, 6F, 7F, 8F, 14H, 15H, 10L
39	74LS374	LSTTL	5D, 7D, 9D, 11D, 5H, 6H, 7H, 5J, 6J, 7J
41	HA13001	POWER AMP	1A, 1C
42	LM324	QUAD OP-AMP	5C, 7C, 8C, 10C, 3E
43	LM358	(No description)	1D
44	MSM5204	(No description)	4D, 6D, 8D, 10D
45	MSM5205	(No description)	1E, 2E
46	16P8B	PAL	2J, 4J
47	16RP4	PAL	3J
48	M54532	TRANSISTOR ARRAY	6A, 7A, 14A, 15A
49	8751H	1 CHIP CPU	9H
50	8.00MHz	8P DIP	XL1
51	3.58MHz	8P DIP	XL2
52	DIPSW (8P)	8P DIP	DIP1-DIP4
53	16P SOCKET	IC SOCKET	13H, 12J, 12K
54	20P SOCKET	IC SOCKET	2J, 3J, 4J
55	28P SOCKET	IC SOCKET	7K
56	32P SOCKET	IC SOCKET	1K, 2K
57	40P SOCKET	IC SOCKET	3K, 4K, 9H
59	0 OHM	JUMPER	JP2
60	220 OHM	RES CARBON 1/4W 5%	R1
62	470 OHM	RES CARBON 1/4W 5%	R70
63	560 OHM	RES CARBON 1/4W 5%	R47, R49, R69, R71

Street Fighter Game PCB Assembly, continued (Board A) Parts List

64	1K OHM	RES CARBON ¼W 5%	R12, R23, R34, R45, R66, R68
65	2.2K OHM	RES CARBON ¼W 5%	R2, R60, R63, R64
66	3.0K OHM	RES CARBON ¼W 5%	R13, R24, R35, R46
67	3.3K OHM	RES CARBON ¼W 5%	R59
68	4.7K OHM	RES CARBON ¼W 5%	R5, R16, R27, R38, R50, R53
69	10K OHM	RES CARBON ¼W 5%	R3, R8, R9, R14, R19, R20, R25, R30, R31, R36, R41, R42, R56, R57
70	15K OHM	RES CARBON ¼W 5%	R4, R15, R26, R37, R61, R62, R72
71	22K OHM	RES CARBON ¼W 5%	R48
72	33K OHM	RES CARBON ¼W 5%	R65, R67
73	47K OHM	RES CARBON ¼W 5%	R58
74	50K OHM	RES CARBON ¼W 5%	R6, R7, R17, R18, R28, R29, R39, R40
75	27K OHM	RES CARBON ¼W 5%	R51, R54
76	100K OHM	RES CARBON ¼W 5%	R10, R11, R21, R22, R32, R33, R43, R44
77	470×8	SIP 9P ⅛W 5%	RM12, RM13
79	2.2K×8	SIP 9P ⅛W 5%	RM1, RM8-RM11, RM16
80	4.7K×8	SIP 9P ⅛W 5%	RM2
81	22K×8	SIP 9P ⅛W 5%	RM6, RM7, RM14, RM15
82	CRO84	SIP 9P ⅛W 5%	RC1-RC7
83	RP39	SIP 9P ⅛W 5%	RM3-RM5
84	2K B	VR RGP202	VR5, VR6
85	4.7K B	VR RGP472	VR1-VR4
86	uA7808	REGULATOR	QR1
89	102/16v	DISC CER 20%	C3, C6
90	152/16v	DISC CER 20%	C4, C7, C21
91	222/16v	DISC CER 20%	C15, C19
92	682/16v	DISC CER 20%	C14
93	223/16v	DISC CER 20%	C12, C13, C16, C20
94	104/16v	DISC CER 20%	C1, C2, C9, C10, C17, C18, C21, C22, C30-C128
96	4.7u/16v	ELEC VB	CC13, CC19
97	10u/16v	ELEC VB	CC1, CC2, CC3, CC5, CC8, CC9, CC15, CC21-CC29
98	47u/16v	ELEC VB	CC7
99	100u/16v	ELEC VB	CC10-CC12, CC14, CC16, CC17, CC18, CC20
100	2200u/25v	ELEC TUBLAR	CC60
101	10u/10v	DIP TANTALUM	CC30-CC55
102	50p FLAT	CONNECTOR	CN2, CN3, CN4
103	SHF-10	CONNECTOR	CN5
104	SHF-12	CONNECTOR	CN6
105	VH-8	CONNECTOR	CN7
106	HEAT SINK	(No description)	1A, 1C
107	P-1880	COPAL	PS1-PS4

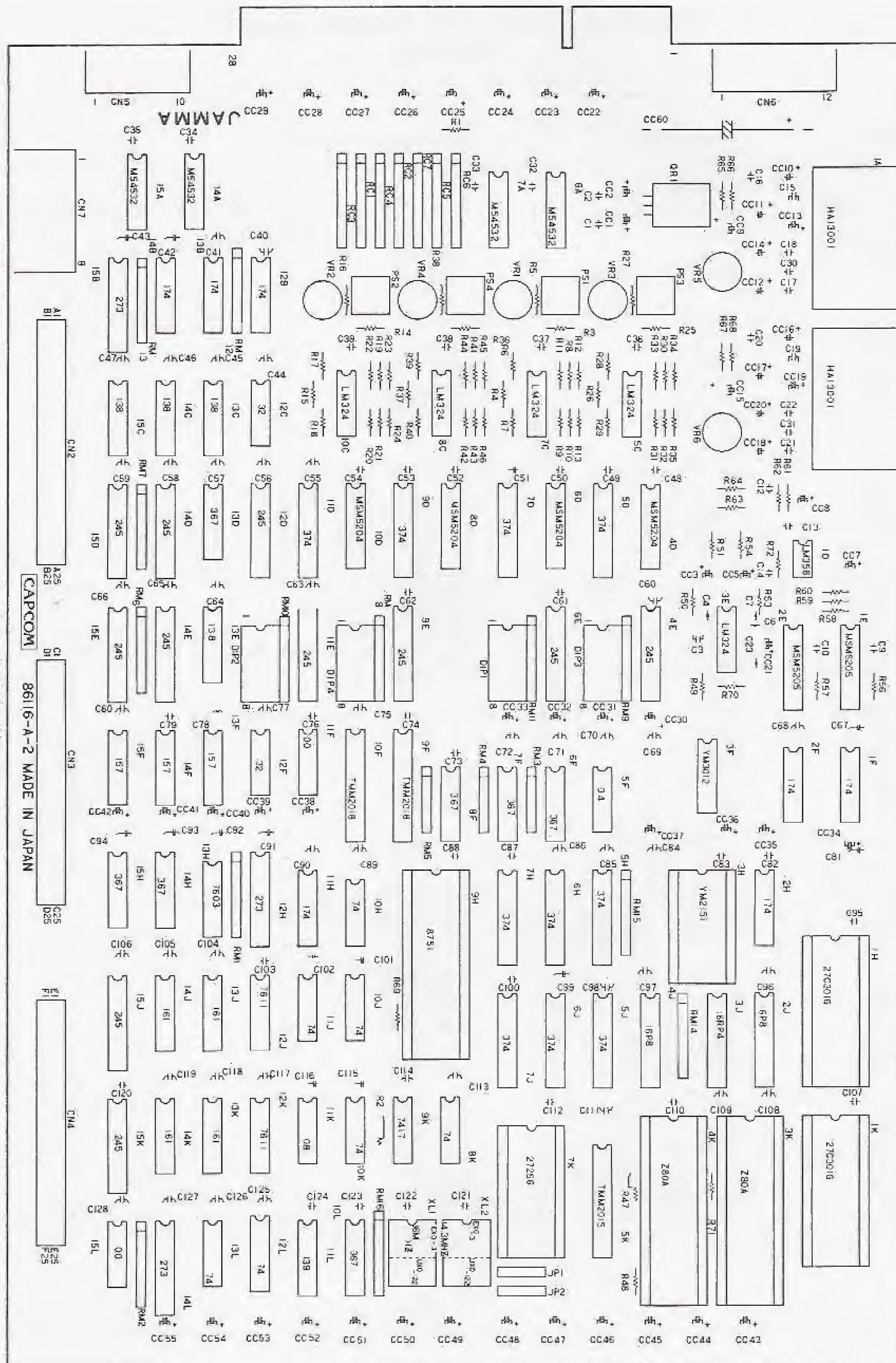
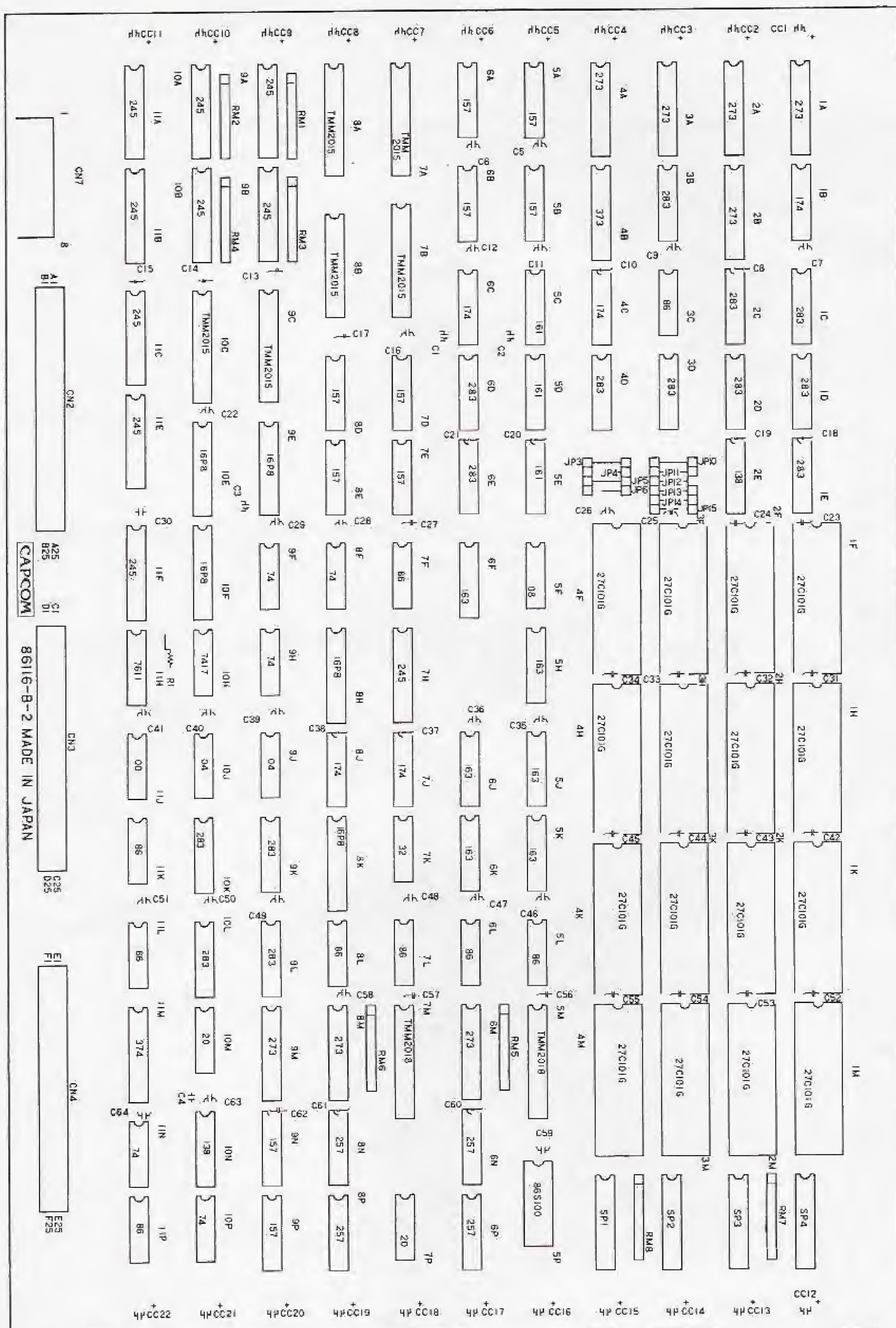


Figure 4-6 Street Fighter Game PCB Assembly (Board A)
86116-A

Street Fighter Game PCB Assembly (Board B) Parts List

Item No.	Part No.	Description	Reference Designator
4	86S100	CUSTOM IC	5P
8	uPD231000C	1M MASK ROM	1F, 1H, 1K, 1M, 2H, 2K, 2M, 3F, 3H, 3K, 3M, 4H, 4K, 4M
11	TMM2015-12	16K SRAM	7A, 8A, 7B, 8B, 9C, 10C
12	TMM2018-45	8K SRAM	5M, 7M
16	7611	BIPOLAR PROM	11H
17	74LS00	LSTTL	11J
18	74LS04	LSTTL	9J, 10J
19	74LS07	LSTTL	10H
20	74LS08	LSTTL	5F
21	74LS20	LSTTL	7P, 10M
23	74LS32	LSTTL	7K
24	74LS74A	LSTTL	8F, 9H, 9F, 10P, 11N
25	74LS86	LSTTL	5-8L, 11L, 11K, 11P, 3C, 7F
26	74LS138	LSTTL	2E, 10N
28	74LS157	LSTTL	5A, 6A, 5B, 6B, 7D, 8D, 7E, 8E, 9N, 9P
29	74LS161A	LSTTL	5C, 5D, 5E
30	74LS163	LSTTL	5J, 5K, 5H, 6F, 6J, 6K
31	74LS174	LSTTL	1B, 4C, 6C, 7J, 8J
33	74LS245	LSTTL	9A, 9B, 10A, 10B, 11A, 11B, 11C, 11E, 11F, 7H
34	74LS257	LSTTL	6N, 6P, 8N, 8P
35	74LS273	LSTTL	1A, 2A, 3A, 4A, 6M, 8M, 9M, 2B
36	74LS283	LSTTL	1D, 2D, 3D, 4D, 6D, 9K, 9L, 10K, 10L, 1C, 2C, 1E, 6E, 3B
38	74LS373	LSTTL	4B
39	74LS374	LSTTL	11M
46	16P8B	PAL	8H, 8K, 9E, 10E, 10F
52	DIPSW(8P)	8P DIP	DIP1-DIP4
53	16P SOCKET	IC SOCKET	11H
54	20P SOCKET	IC SOCKET	8H, 8K, 9E, 10E, 10F
59	0 OHM	JUMPER	JP4, JP5, JP13, JP14, JP15
71	22K OHM	CARBON 1/4W 5%	R1
78	1K \times 8	SIP 9P 1/8W 5%	RM5, RM6
80	4.7K \times 8	SIP 9P 1/8W 5%	RM1-RM4
81	22K \times 8	SIP 9P 1/8W 5%	RM7, RM8
88	220P/16v	DISC CER 20%	C1-C4
94	104/16v	DISC CER 20%	C5-C64
101	10u/10v	DIP TANTALUM	CC1-CC22
102	50p FLAT	CONNECTOR	CN2, CN3, CN4
103	SHF-10	CONNECTOR	CN5
104	SHF-12	CONNECTOR	CN6
105	VH-8	CONNECTOR	CN7



Street Fighter Game PCB Assembly (Board C) Parts List

Item No.	Part No.	Description	Reference Designator
4	86S100	CUSTOM IC	4E, 2L, 4L
6	MC68000	MPU 8MHz	6A
7	27512	512K EPROM	2A, 2C, 3A, 3C, 4A, 4C, 3G, 3H, 4G, 4H
8	uPD231000C	1M MASK ROM	1D, 1E, 1G, 1H, 1K, 2D, 2E, 2G, 2H, 2K, 3K, 4K
9	27256-25	256K EPROM	4D
10	D43256	256K SRAM	9C, 11C
11	TMM2015-12	16K SRAM	7D, 8D
18	74LS04	LSTTL	11A, 13D
19	74LS07	LSTTL	10A, 10B
20	74LS08	LSTTL	10K, 10L
21	74LS20	LSTTL	13L
22	74LS30	LSTTL	13E
23	74LS32	LSTTL	8A, 5E
24	74LS74A	LSTTL	9A, 11G, 12D, 12F
25	74LS86	LSTTL	9E, 9L, 11E, 11K, 11L, 12G, 12J, 12L, 13F, 13J, 8L, 5M
26	74LS138	LSTTL	12K, 7M
27	74LS139	LSTTL	5F
28	74LS157	LSTTL	9D, 10D, 11D
31	74LS174	LSTTL	5H, 5K, 5L, 6E, 6G, 6J, 6L, 7G, 7H, 8H, 9H, 10E
32	74LS175	LSTTL	13K, 12H, 6M
33	74LS245	LSTTL	7B, 7C, 7E, 8C, 8E, 12A, 12C, 13A, 13B
35	74LS273	LSTTL	5D, 6D, 6H, 6K, 7L, 8G, 8J, 8M, 9K, 10M, 11J, 11F, 12M, 13G, 13H
36	74LS283	LSTTL	7K, 8K, 9F, 9G, 9J, 10F, 10G, 10H, 10J, 11H
39	74LS374	LSTTL	9M, 11M, 12M
40	M51953B	RESET IC	QR1
46	16P8B	PAL	8B, 12E
47	16RP4B	PAL	1A
55	20P SOCKET	IC SOCKET	1A, 8B, 12E
56	28P SOCKET	IC SOCKET	4D, 2A, 2C, 3A, 3C, 4A, 4C, 3G, 3H, 4G, 4H
60	0 OHM	JUMPER	JP3, JP7, J014, JP17, JP18, JP22, JP25, JP29, JP30, JP32, JP33
63	330 OHM	CARBON ¼W 5%	R2
67	2.2K OHM	CARBON ¼W 5%	R1
81	2.2K×8	SIP 9P ¼W 5%	RM1
83	22K×8	SIP 9P ¼W 5%	RM2-RM17
96	104/16v	DISC CER 20%	C1-C70
97	22u/16v	TANTAL LOW-LEAK	CC1
103	10u/10v	DIP TANTALUM	CC10-CC35
104	50P FLAT	CONNECTOR	CN2, CN3, CN4
105	SHF-10	CONNECTOR	CN5
106	SHF-12	CONNECTOR	CN6
107	VH-8	CONNECTOR	CN7

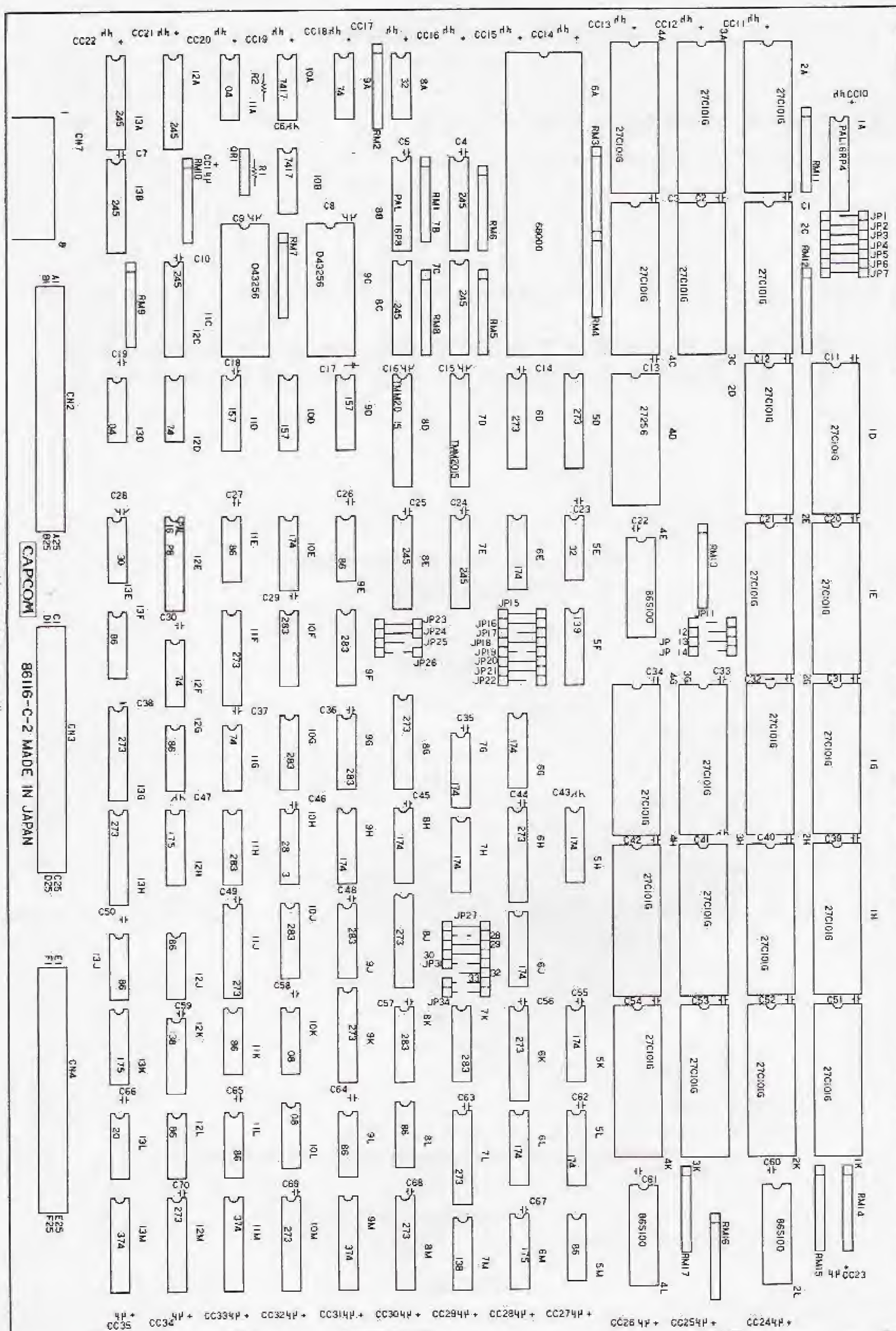
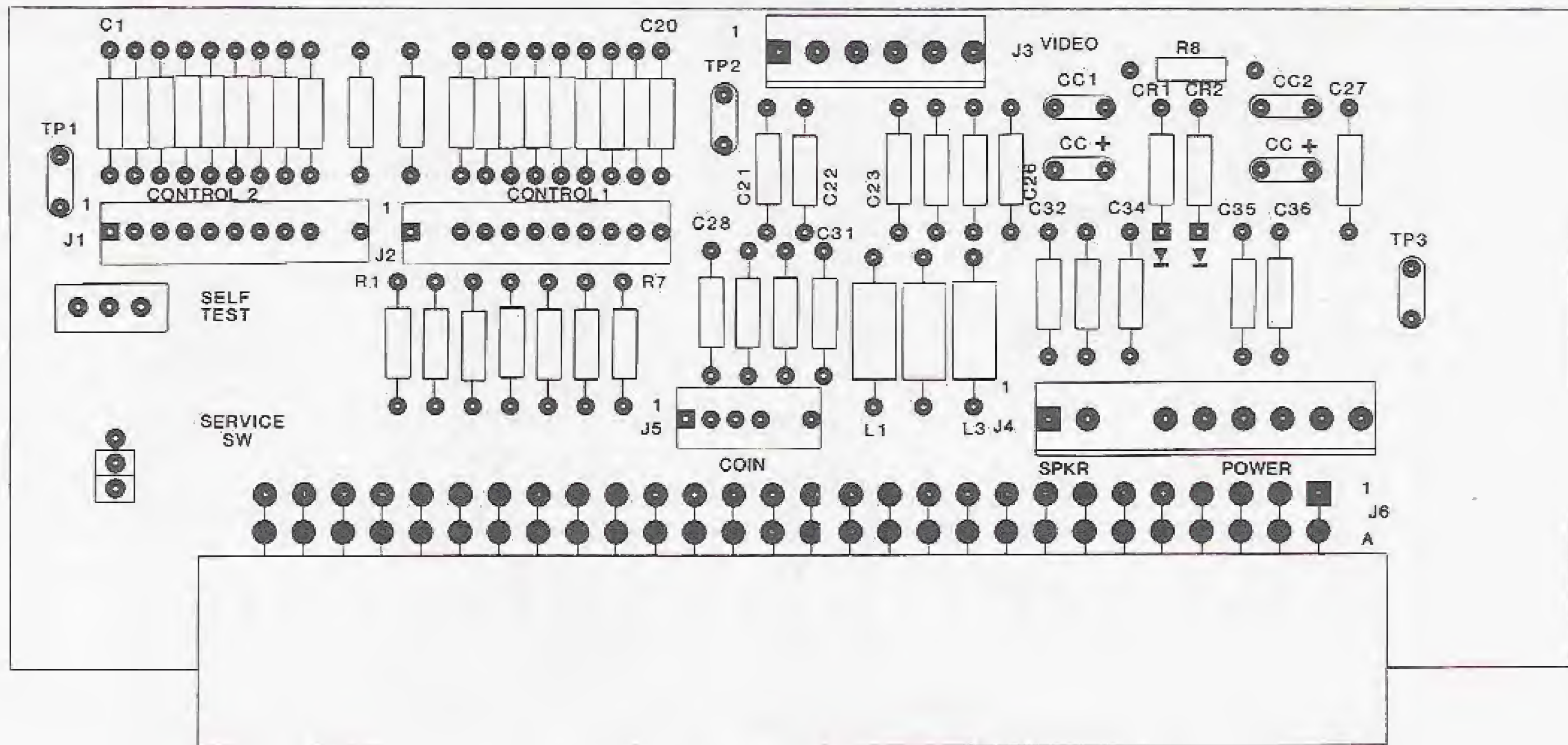


Figure 4-8 Street Fighter Game PCB Assembly (Board C)
86116-B



**Figure 4-9 End PCB Assembly
A044201-01 A**

**End PCB Assembly
Parts List**

Designator	Description	Part No.
Capacitors		
C1-C21	.1 μ F, 50 V Ceramic Capacitor	122002-104
C22	.001 μ F, 50 V Ceramic Capacitor	122002-102
C23-C25	470 pF, 100 V Ceramic Capacitor	122016-471
C26-C31	.1 μ F, 50 V Ceramic Capacitor	122002-104
C32, C33	.01 μ F, 25 V Ceramic Capacitor	122005-103
C34-C36	.1 μ F, 50 V Ceramic Capacitor	122002-104
Diodes		
CR1, CR2	Type-1N4001 Diode	131048-001
Connectors		
J1, J2	11 Ckt., .1-Inch Ctr. Header Connector	179118-011
J3	6 Ckt., .156-Inch Ctr. Header Connector	179213-006
J4	9 Ckt., .156-Inch Ctr. Header Connector	179213-009
J5	6 Ckt., .1-Inch Ctr. Header Connector	179118-006
J6	56 Ckt., Right-Angle Edge Connector (Acceptable substitute is part no. 179240-156)	179240-056
Resistors		
R8	0 Ω , $\pm 5\%$, $\frac{1}{4}$ W Resistor	110005-001
Miscellaneous		
L1-L3	Ferrite Bead	141003-005
CC+, CC+	Test Point, .187 \times .031	179051-001
TP3	Test Point, .250 \times .031	179051-003
	SPDT Miniature Slide Self-Test Switch	160040-001
	2 Ckt., .1-Inch Ctr. Header Connector (Service Switch)	179118-002

N O T E S

N O T E S

Street Fighter Limited Warranty

CAPCOM USA, INC. ("Seller") warrants only to the initial purchaser of its products that the items listed below are free from defects in material and workmanship under normal use and service for the warranty periods specified:

- | | |
|---------------------------|---------|
| A. Printed-circuit boards | 90 days |
| B. Television monitor | 30 days |
| C. Power supplies | 30 days |

No other parts of Seller's products are warranted.

Warranty periods are effective from the initial date of shipment from Seller to its authorized distributors.

Seller's sole liability shall be, at its option, to repair or replace products which are returned to Seller during the warranty periods specified, provided:

- A. Seller is notified promptly upon discovery by buyer that stated products are defective.
- B. Buyer obtains Return Materials Authorization number (RMA).
- C. Such products are properly packaged and then returned prepaid to Seller's plant.

This warranty does not apply to any parts damaged during shipping or handling, or due to improper installation or usage, or alteration. In no event shall Seller be liable for any anticipated profits, loss of profits, loss of use, incidental or consequential damages or any other losses incurred by the customer in connection with the purchase of a CAPCOM USA, Inc. product.

Warranty Disclaimer:

Except as specifically provided in a written contract between Seller and Purchaser, there are no other warranties, expressed or implied, including any implied warranties of merchantability or fitness for a particular purpose.

CAPCOM

THE EAST ASIA

EXCHANGERS

CAPCOM USA, INC.
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Sunnyvale, California 94089